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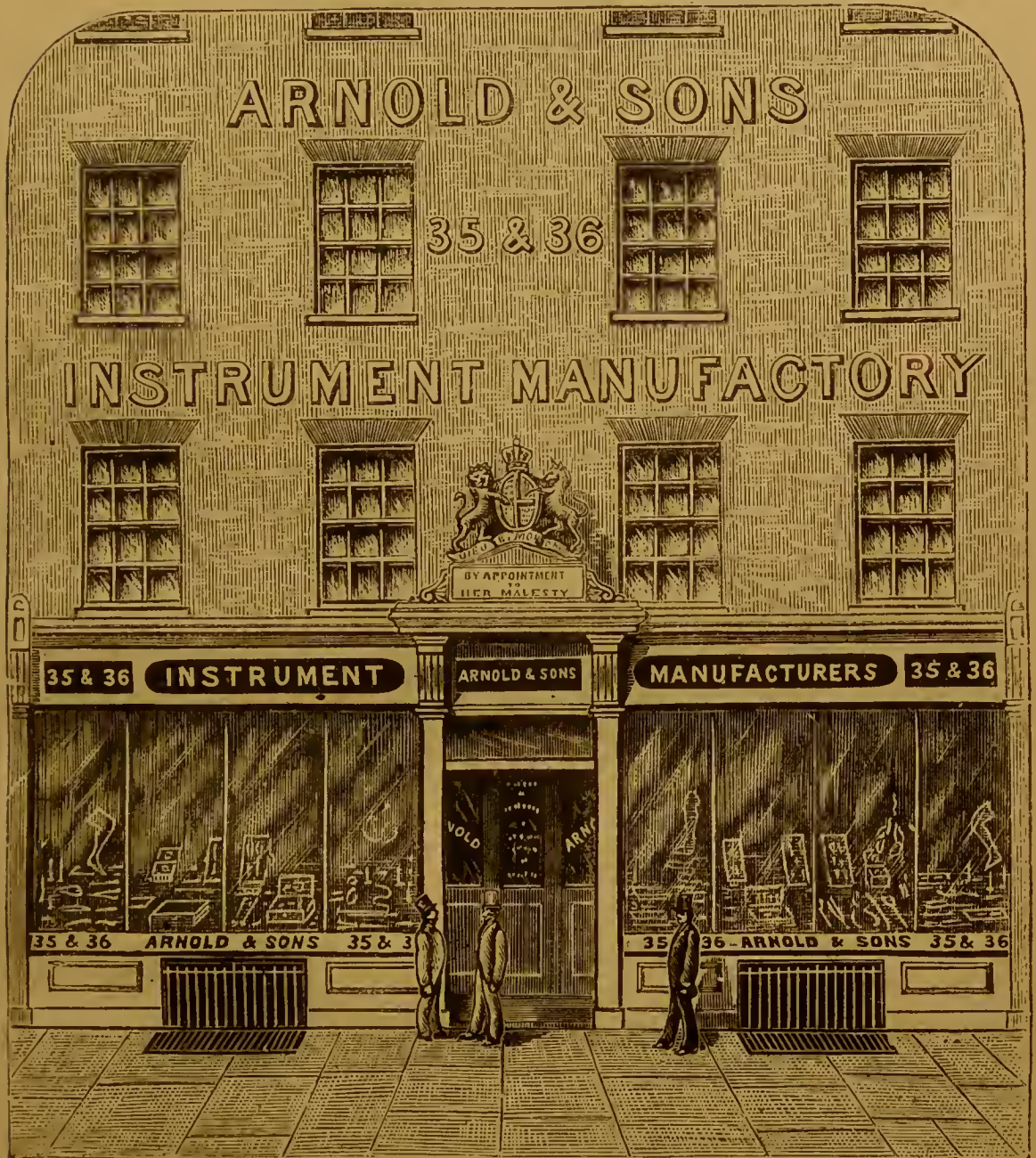
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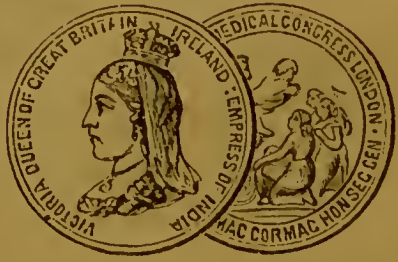
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P R E F A C E.

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VETERINARY INSTRUMENTS.

CLYSTER SYRINGES, ETC.

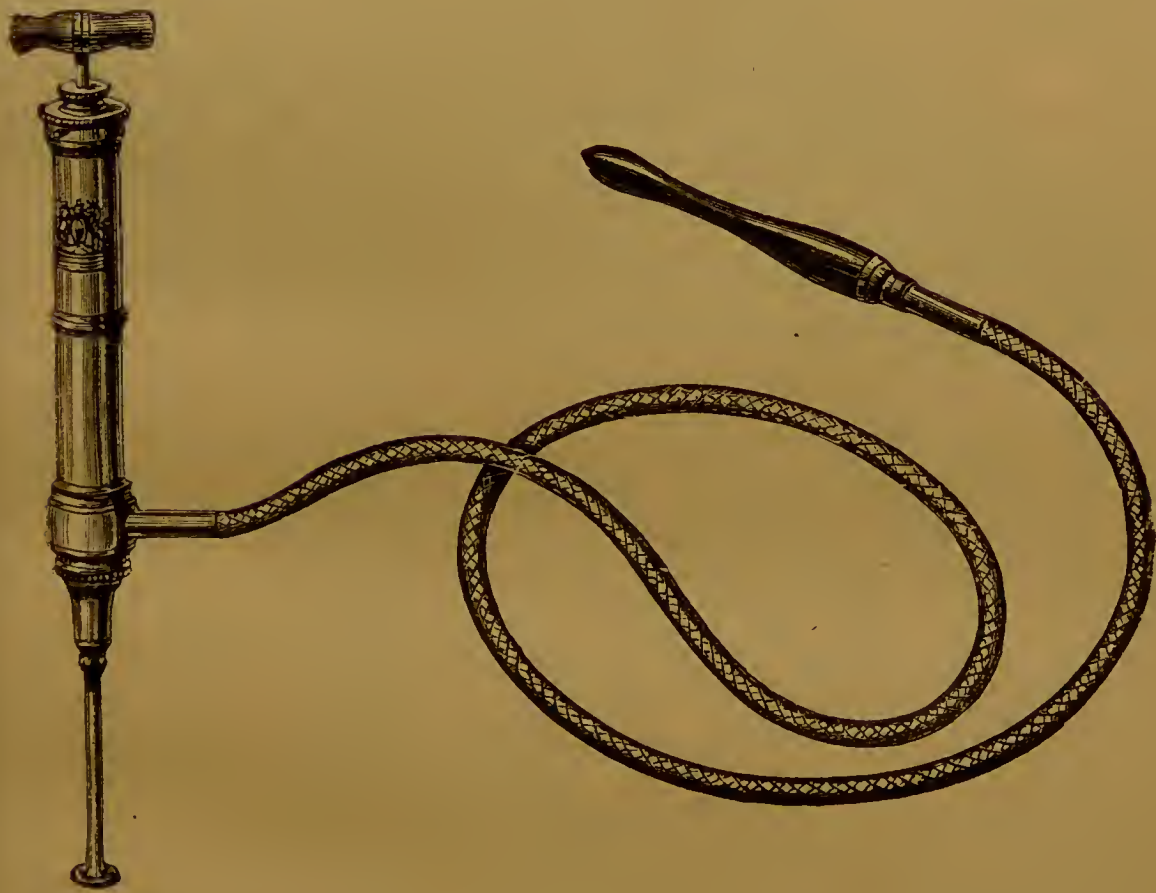


Fig. 1.

| | £ | s. | d. |
|--|---|----|----|
| Brass Horse Clyster Syringe, with 6 feet superior Elastic Web Tubing, Ebony Clyster Pipe, Brass Mounts, etc., A. & Sons' modification of Read's expired patent, in Bag, complete, Fig. 1 | 2 | 2 | 0 |
| „ „ in Mahogany Case, lined with Velvet .. | 3 | 0 | 0 |
| „ „ with addition of Elastic Horse Catheter, and Ebony Mouth Gag, in Mahogany Case, lined with Velvet, complete | 4 | 0 | 0 |



Fig. 2.

| | £ | s. | d. |
|--|---|----|----|
| Brass Horse Clyster Syringe, with 6 feet superior elastic web tubing, ebony clyster pipe, Horse Catheter, ebony mouth gag and tobacco fumigator, brass mounts, &c., A. and Sons' modification of Read's expired patent, in mahogany case, lined with velvet, complete, Fig. 2 .. | 4 | 10 | 0 |
| „ „ with addition of 3 ebony pipes for calf, sheep, and dog | 5 | 0 | 0 |

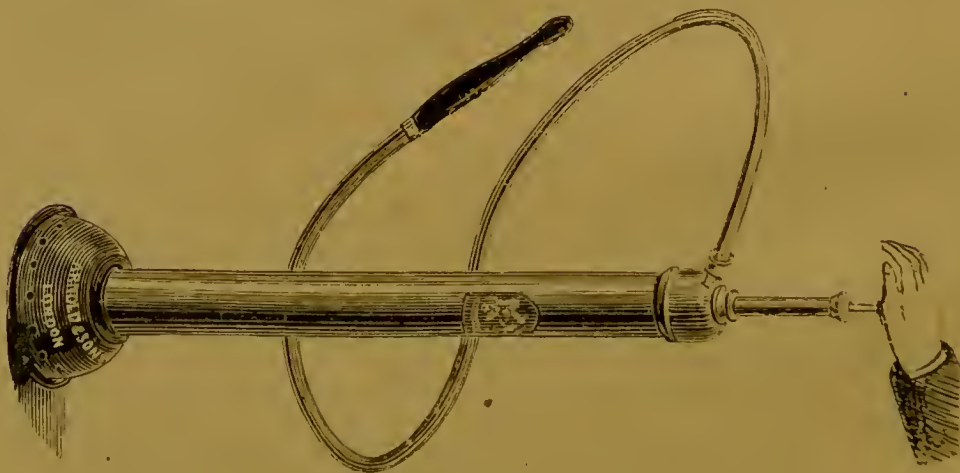


Fig. 3.

| | | | |
|---|---|----|---|
| A. and Sons' Patent Simplex Brass Horse Enema Syringe, Fig. 3 | 2 | 10 | 0 |
|---|---|----|---|

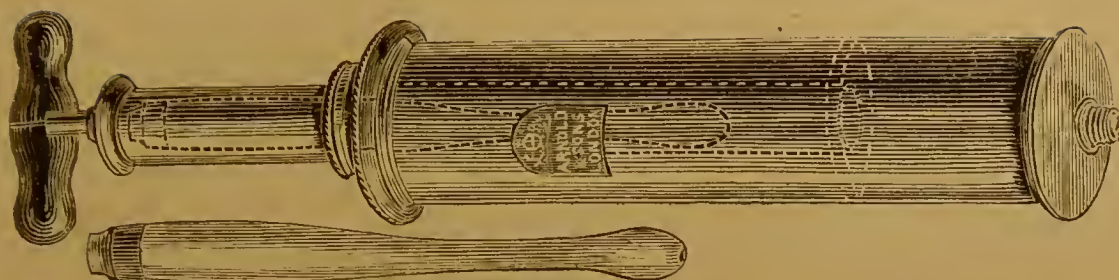


Fig. 4.

| | | | | | | £ | s. | d. |
|------------------------------|------------------------|--------------|--------------------|---------|--------|---|----|----|
| Brass Horse Clyster Syringe, | 1 quart, | very strong, | carries | | | | | |
| | pipe in piston-rod for | portability, | complete, | in bag, | Fig. 4 | 1 | 1 | 0 |
| „ | „ | „ | 3 pints | .. | .. | 1 | 10 | 0 |
| „ | „ | „ | for Foals | .. | .. | 0 | 15 | 0 |
| „ | „ | „ | Calves, Sheep, &c. | .. | .. | 0 | 12 | 6 |



Fig. 5.

| | | | | | | | | |
|--|----|----|----|----|----|---|---|---|
| Portable Brass Clyster Syringe, by Mr. Winton, M.R.C.V.S., | | | | | | | | |
| with pipes for Horse, Foal, Sheep, &c., in leather case, | | | | | | | | |
| complete, Fig. 5 | .. | .. | .. | .. | .. | 2 | 0 | 0 |

EXTRACT FROM "VETERINARY JOURNAL," APRIL, 1881.

"Messrs. Arnold, of West Smithfield, have made for me a very compact and handy little enema pump, and thinking it may prove a great boon to some of my professional brethren in the country, who ride, I take the present opportunity of drawing their attention to it. It is easily carried in the coat-pocket, the flexible pipe being

carried over the shoulder under the coat or vest (where, by-the-by, one should always carry the male catheter). Instead of using a stable pail I get a man to hold a hand-bowl or jug, which is much more handy. Many of my best clients, knowing my objection to carry my old-fashioned and cumbersome instrument when riding, used to ask me whether I had brought my piano to-day? The present instrument bears about the same comparison to the old one as a revolver pistol does to an old blunderbuss. One can fill the gut in a few minutes with the new instrument, and I have always found in cases of stoppage that the lower bowel is more irritable, and retains an enema slowly injected (and the gut only half or three-fourths full) much better than when thrown in quickly. The last, but not least, of its virtues is its cost, which is only about two guineas. It might be greatly improved in appearance by being well plated. Please accept my apology for trespassing so far on your valuable space.—I have the honour to be, sir,

“Yours faithfully,

“D. WINTON, V.S.”

| | | | | | £ | s. | d. |
|---|--------------|----|----|-------------|---|----|----|
| Tobacco Fumigator, for use with clyster pump | .. | .. | | | 0 | 12 | 0 |
| Clyster Syringe, pewter, carries pipe in piston-rod for portability | 1 quart | .. | .. | .. | 1 | 0 | 0 |
| ” | 3 pints | .. | .. | .. | 1 | 5 | 0 |
| ” | 2 quarts | .. | .. | .. | 1 | 10 | 0 |
| ” | for Dogs | .. | .. | 4s. 6d. and | 0 | 7 | 6 |
| ” | ” Colts, &c. | .. | .. | 9s. 6d. and | 0 | 12 | 6 |
| ” | ” Mules | .. | .. | .. | 2 | 7 | 0 |
| ” | ” Elephants | .. | .. | .. | 3 | 3 | 0 |

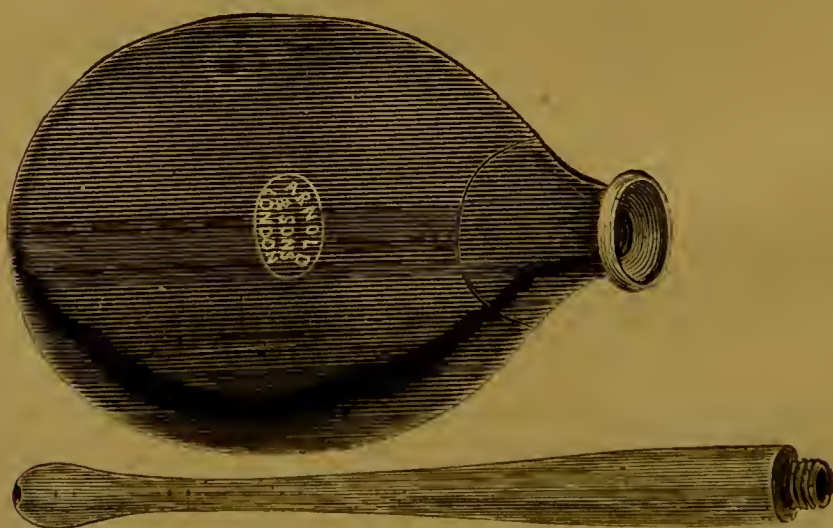


Fig. 6.

| | | | | |
|---|----|---|----|---|
| Clyster Pipe, with india-rubber bag, large size, Fig. 6 | .. | 0 | 12 | 6 |
| ” ” ” ” ” small size | .. | 0 | 9 | 0 |

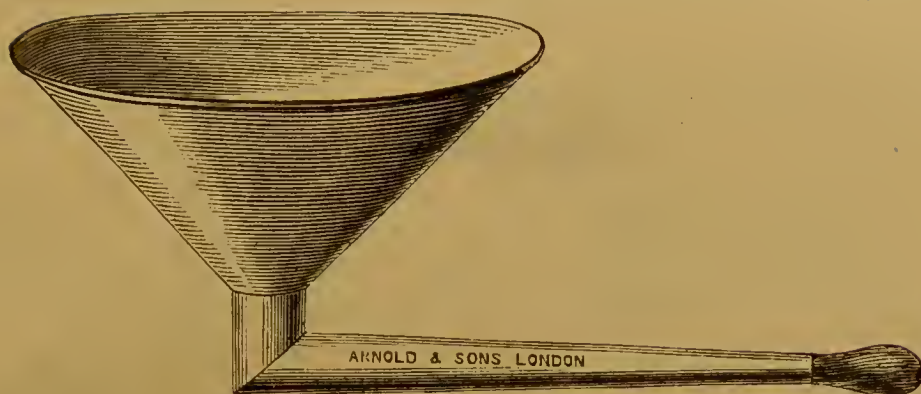


Fig. 7.

| | £ | s. | d. |
|--|---------------------|----|----|
| Clyster Funnel, improved by Mr. Dickinson, Fig. 7 .. | 0 | 7 | 6 |
| „ „ by Prof. Gamgee | 0 | 7 | 6 |
| „ „ for Sheep, Foals, &c. | 0 | 7 | 6 |
| „ Pipes of wood, 12, 14, and 16 in. .. | 1s. 6d., 2s., and 0 | 2 | 6 |



Fig. 8.

| | | | |
|--|---|---|---|
| Arnold & Sons' Patent Simplex Dog Enema, Fig. 8 .. | 0 | 5 | 0 |
|--|---|---|---|

QUITTOR SYRINGES.



Fig. 9.

| | | | |
|--|---|---|---|
| Quittor Syringe, Arnold & Sons' improved, brass, with 3 silver pipes, different sizes, in leather case, complete, Fig. 9 | 1 | 1 | 0 |
|--|---|---|---|

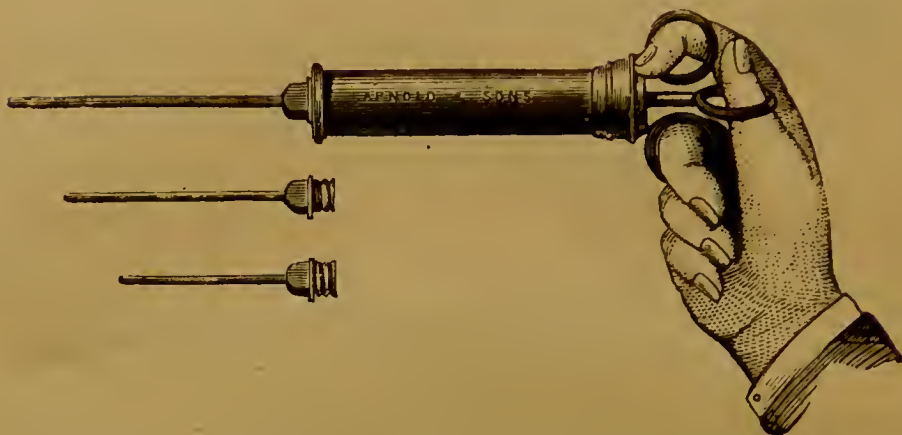


Fig. 10.

| | £ | s. | d. |
|--|---|----|----|
| Quittor Syringe, vulcanite, by Prof. Pritchard, with 3 pipes, in case, complete, Fig. 10 | 0 | 15 | 0 |



Fig. 11.

| | | | |
|--|---|---|----|
| Quittor Syringe, brass, A. and Sons' improved, with finger rings, can be used with one hand, Fig. 11 | 0 | 7 | 6 |
| " " " with flexible pipe | 0 | 7 | 6 |
| " " " plain pattern | 0 | 5 | 0 |
| " " pewter, 1 oz. | 0 | 1 | 6 |
| " " " 2 oz. | 0 | 2 | 0 |
| " " " 2 oz., with pipe in handle | 0 | 2 | 6 |
| Pewter Syringe $\frac{1}{4}$ oz. | 0 | 0 | 4 |
| " " $\frac{1}{2}$ oz. | 0 | 0 | 5 |
| " " 1 oz. | 0 | 0 | 6 |
| Bone Syringe $\frac{1}{2}$ oz. | 0 | 0 | 8 |
| " " 1 oz. | 0 | 0 | 10 |



Fig. 12.

| | | | |
|--|---|----|---|
| Brass Syringe, with 3 metal bulbous pipes, for washing out wounds, &c., by Mr. Bowles, Fig. 12 | 0 | 12 | 6 |
|--|---|----|---|

SUBCUTANEOUS INJECTION SYRINGES, ETC.

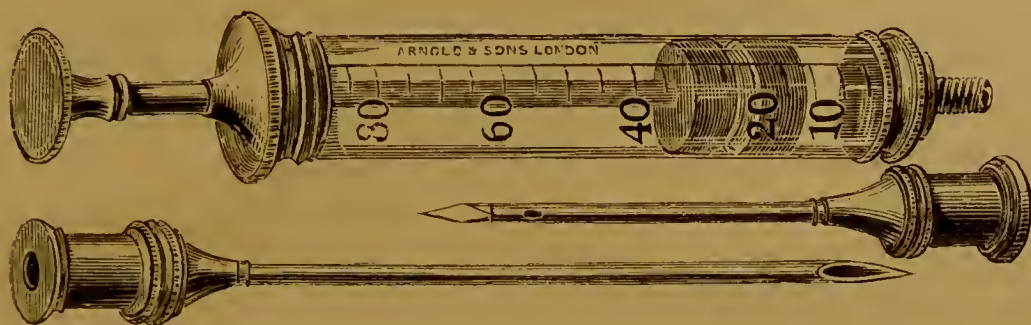


Fig. 13.

Subcutaneous Injection Syringe, A. and Sons' patent, with self-lubricating plunger, in leather case, complete, Fig. 13 1 1 0

EXTRACT FROM "LANCET," JULY 20TH, 1878.

"We have received from Messrs. ARNOLD & SONS an improved patent hypodermic syringe, which is represented in the accompanying woodcut. The improvement consists in a reservoir, containing oil (in the centre of the plunger); a small piston-rod is inserted inside the ordinary piston, and attached to the handle of the syringe by means of a screw. We have tried this little instrument, which is manufactured by Messrs. ARNOLD & SONS, of West Smithfield, and can testify to the ease and readiness with which it works; one of the chief difficulties in the use of hypodermic syringes having been successfully overcome by the invention."

EXTRACT FROM "MEDICAL TIMES AND GAZETTE,"
AUGUST 3RD, 1878.

"Another important advantage over existing instruments is, that the plunger, being constantly expanded by moisture, fits the cylinder accurately. The graduations on the barrel are accurately marked in *red*, which is indelible, and the exact quantity injected can be readily seen. The application of this self-lubricating plunger, for which Her Majesty's Letters Patent have been granted, can be applied to all syringe enemas, etc."

EXTRACT FROM "MEDICAL PRESS AND CIRCULAR,"
AUGUST 7TH, 1878.

"Another important improvement is secured by having the mounts screwed on the glass, thereby rendering it impossible to remove the mount from the cylinder, unless by breakage."

J. M. HYDE, Esq., of 45, Round Hill Crescent, Brighton, writes:—"I regard your special construction as greatly facilitating the use of the hypodermic syringe."

J. L. CRAWCOUR, Esq., of 249, Camp Street, New Orleans, U.S.A., writes:—"I need not say that it is, without exception, the best syringe I have ever seen or used, and my experience has been very large."

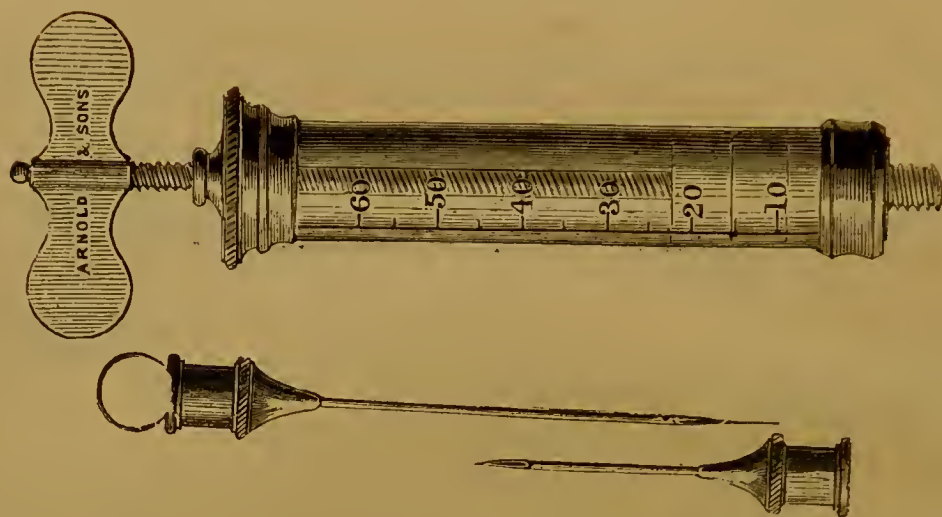


Fig. 14.

£ s. d.

Subcutaneous Injection Syringe, by Prof. Simonds, with
regulating screw, and stoppered bottle, in case, complete,
Fig. 14 1 5 0

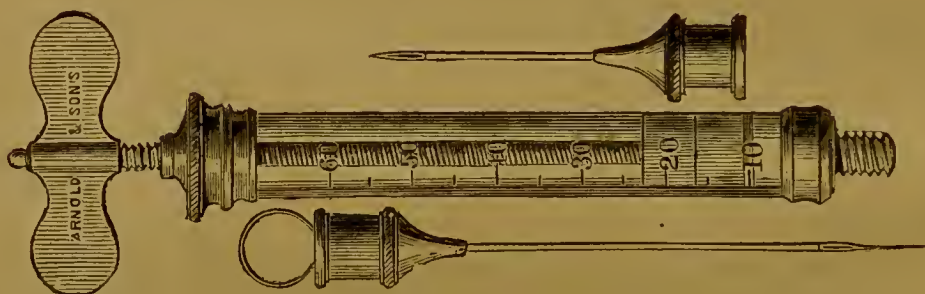


Fig. 15.

Subcutaneous Injection Syringe, with regulating screw
piston, small, complete in case, Fig. 15 1 1 0



Fig. 16.

Subcutaneous Injection Syringe, with 2 pipes, small, in
case, complete, Fig. 16 0 12 6
" " " Vulcanite, in case .. 0 10 6
Syringe for destroying tumours, &c., by injections of acetic
acid, in case, complete 1 5 0

ANATOMICAL SYRINGES.

| | | | | £ | s. | d. |
|--|----|--|--|---|----|----|
| Anatomical Syringe, 4 oz., with stopcock and 6 pipes | .. | | | 2 | 2 | 0 |
| „ „ 6 oz. „ „ „ | .. | | | 2 | 15 | 0 |
| „ „ 8 oz. „ „ 8 pipes | .. | | | 3 | 3 | 0 |
| „ „ 4 oz., with stopcock pipes | .. | | | 2 | 10 | 0 |
| „ „ 6 oz. „ „ .. | .. | | | 3 | 0 | 0 |
| „ „ 8 oz. „ „ .. | .. | | | 3 | 10 | 0 |

POST-MORTEM & DISSECTING INSTRUMENTS.

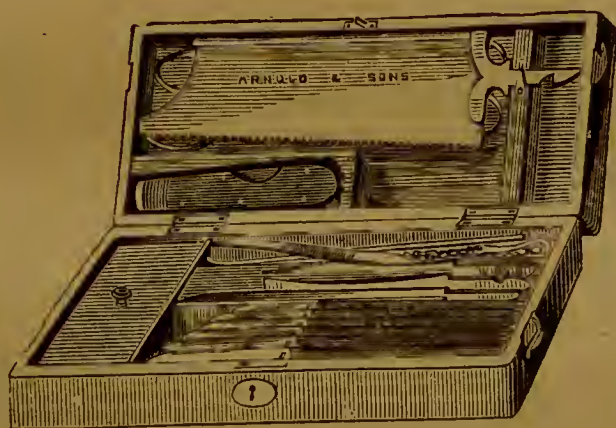


Fig. 17.

| | £ | s. | d. |
|--|---|----|----|
| Post-mortem Instruments, containing saw, strong knife, cartilage knife, and chisel, fitting one spring socket handle, 6 scalpels, 2 pairs scissors, chain hooks, forceps, blowpipe, and needles, in mahogany case, complete, Fig. 17 | 2 | 10 | 0 |
| „ „ with chequered ivory handles, brass bound mahogany case, very superior | 4 | 4 | 0 |
| Operation Case, containing 12 scalpels, 3 probe-pointed bistouries, 3 sharp-pointed bistouries, in mahogany brass-bound case, complete | 3 | 3 | 0 |

| | | | | | | £ | s. | d. |
|--|---|----|----|-----------------------------|----|---|----|----|
| Post-mortem | Saw | .. | .. | .. | .. | 0 | 12 | 6 |
| „ | Knife, strong | .. | .. | .. | .. | 0 | 3 | 6 |
| „ | Brain Knife | .. | .. | .. | .. | 0 | 4 | 6 |
| „ | Chisel | .. | .. | .. | .. | 0 | 2 | 6 |
| „ | Needle | .. | .. | .. | .. | 0 | 1 | 0 |
| „ | Scissors | .. | .. | .. | .. | 0 | 4 | 6 |
| „ | Scalpel | .. | .. | .. | .. | 0 | 2 | 6 |
| „ | Forceps | .. | .. | .. | .. | 0 | 2 | 6 |
| „ | Chain Hooks | .. | .. | .. | .. | 0 | 2 | 0 |
| „ | Blowpipe | .. | .. | .. | .. | 0 | 1 | 6 |
| „ | Twine, 3 sizes | .. | .. | per hank | .. | 0 | 0 | 3 |
| Dissecting | Instruments, in mahogany case, containing 4 | | | | | | | |
| | scalpels, 1 pair scissors, dissecting forceps, blowpipe | | | | | | | |
| | (German silver), and set chain hooks. The above set in | | | | | | | |
| | ebony handles | .. | .. | .. | .. | 0 | 16 | 0 |
| „ | „ | | | in ivory handles | .. | 0 | 18 | 6 |
| Superior | Dissecting Instruments, in mahogany case, | | | | | | | |
| | polished throughout, containing 6 scalpels 2 pairs | | | | | | | |
| | dissecting scissors, dissecting forceps, large blowpipe | | | | | | | |
| | (German silver), and set chain hooks. The above set in | | | | | | | |
| | ebony handles | .. | .. | .. | .. | 1 | 1 | 0 |
| „ | „ | | | in ivory handles | .. | 1 | 5 | 0 |
| Dissecting | Apron and Sleeves, complete | .. | .. | .. | .. | 0 | 5 | 0 |
| „ | „ | | | with pockets, india-rubber | .. | 0 | 9 | 6 |
| „ | Sleeves, india-rubber | .. | .. | .. | .. | 0 | 5 | 0 |
| „ | Gloves | .. | .. | per pair | .. | 0 | 10 | 0 |
| „ | „ | | | and Gauntlets, india-rubber | .. | 0 | 15 | 0 |
| „ | Forceps | .. | .. | 2s. and | .. | 0 | 2 | 6 |
| „ | Hooks | .. | .. | per set | .. | 0 | 2 | 0 |
| „ | „ | | | improved by Mr. Thomas | .. | 0 | 5 | 0 |
| „ | Hook, standing on 2 feet, so as to raise the | | | | | | | |
| | subject from the table.. | .. | .. | .. | .. | 0 | 4 | 6 |
| „ | Scalpel | .. | .. | 2s. and | .. | 0 | 2 | 6 |
| „ | Scissors | .. | .. | .. | .. | 0 | 2 | 6 |
| „ | „ | | | side curved, small | .. | 0 | 3 | 6 |
| „ | „ | | | large | .. | 0 | 4 | 6 |
| „ | „ | | | curved blades, small | .. | 0 | 4 | 6 |
| „ | „ | | | large | .. | 0 | 5 | 6 |
| Blowpipe, Improved, with trocar point, by Mr. Nicholls | .. | | | | .. | 0 | 3 | 6 |
| „ | German silver | .. | .. | .. | .. | 0 | 1 | 6 |

HOBBLER, SLINGS, ETC.

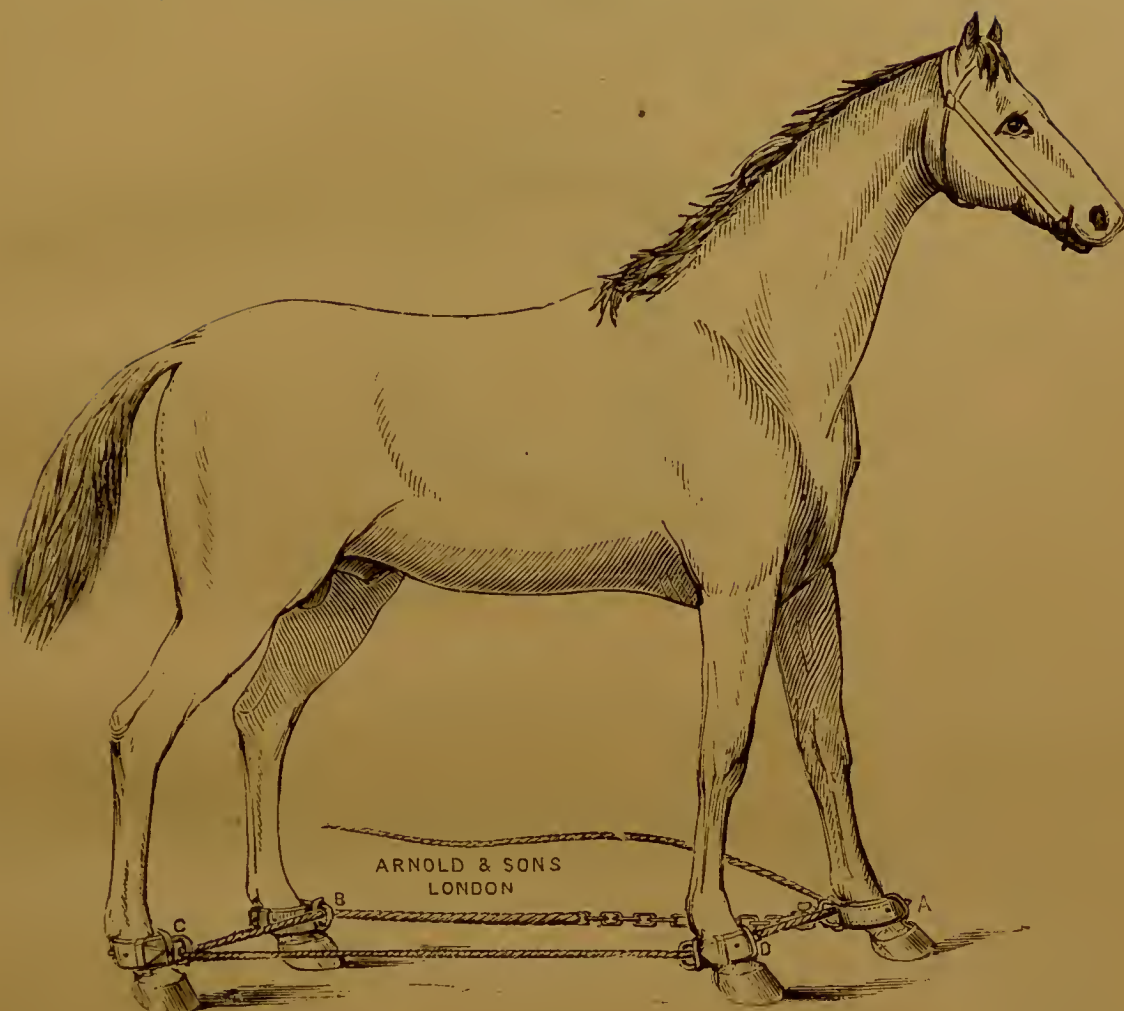


Fig. 18.

| | £ | s. | d. |
|--|---|----|----|
| Hobbles, Arnold and Sons' latest improvement, by which the horse is set at liberty, free from the hobbles, at pleasure, by simply removing the screw, Fig. 18 .. | 5 | 0 | 0 |
| „ with cross hobble, complete, with double swivels .. | 6 | 6 | 0 |
| „ „ „ improved by Mr. Sheather, M.R.C.V.S. .. | 6 | 6 | 0 |

EXTRACT FROM "VETERINARIAN," DECEMBER, 1877.

"The simplicity with which this arrangement of the hobbles can be used, with the assistance of people who do not understand them, is an additional advantage. In conclusion, I may say that Messrs. Arnold and Sons have kindly arranged me a set of well-lined hobbles on this plan, and I have thoroughly tested them, and can advise their construction to the profession as being safe and easily used."

| | £ | s. | d. |
|---|---|----|----|
| Hobble Side Line | 0 | 10 | 6 |
| „ „ A. and Sons' improved, with neck strap, &c. | 1 | 10 | 0 |
| „ „ „ as made for the Army | 0 | 10 | 6 |
| „ for Castrating, improved | 2 | 2 | 0 |
| „ Leg, by W. Pallin, V.S., 20th Hussars | | | |

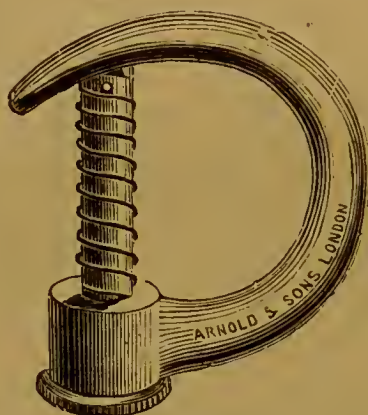


Fig. 19.

| | | | |
|---|---|---|---|
| Hobble Hook, A. and Sons' improved spring, Fig. 19 .. | 0 | 7 | 6 |
|---|---|---|---|

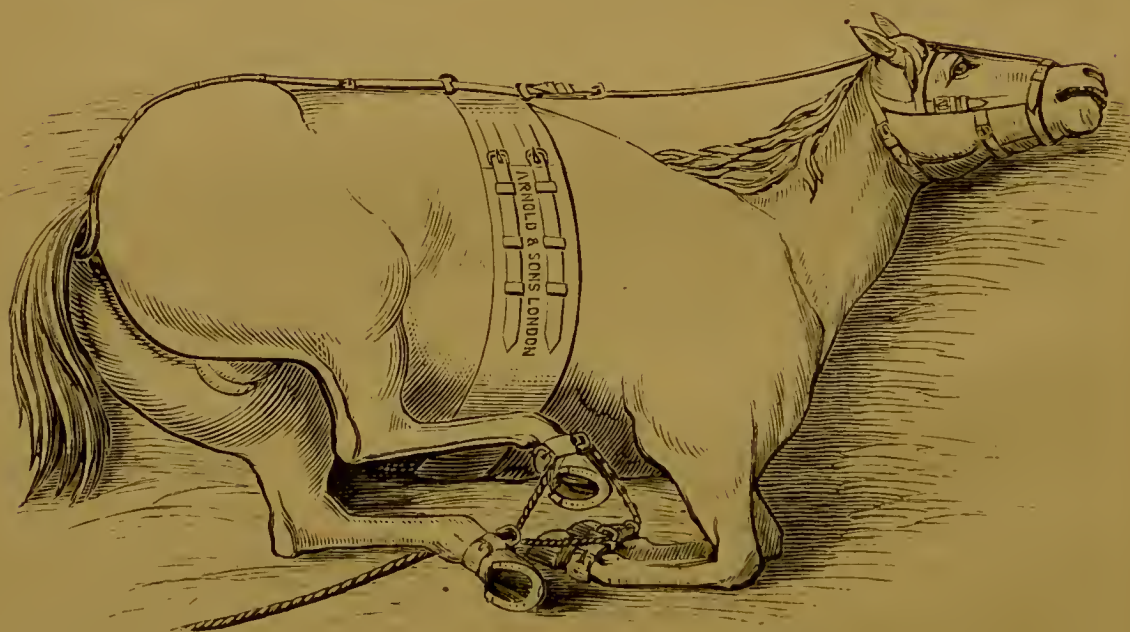


Fig. 20.

| | | | |
|---|---|---|---|
| Improved apparatus for preventing Horses struggling and breaking their backs during operations, by Mr. E. C. Smith, Fig. 20 | 3 | 3 | 0 |
|---|---|---|---|

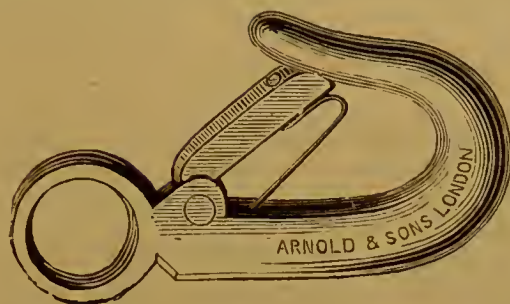


Fig. 21.

| | £ | s. | d. |
|---|---|----|----|
| Hobble Hook, Army pattern, Fig. 21 | 0 | 15 | 0 |
| Cross Hobbles, complete, with double swivels | 2 | 2 | 0 |
| Hobbles for covering Mares | 1 | 10 | 0 |
| Circingles, superior, for using with A. and Sons' improved casting hobbles | 1 | 5 | 0 |
| Leather Blinds for Horses, very stout cupped leather, to protect the eyes per pair | 0 | 12 | 6 |
| NOTE.— <i>Arnold and Sons have made the manufacture of Hobbles a specialité, the leather work and furniture are of the best description, and made by experienced workmen on the premises; the chains are all tested and stamped with the test mark.</i> | | | |
| Horse Slings, with blocks, tackle, &c., made extra strong, with all the latest improvements, very superior, Fig. 22 | 6 | 6 | 0 |
| „ „ with blocks, &c., plain pattern | 4 | 4 | 0 |

EXTRACT FROM PERCIVAL'S "HIPPOPATHOLOGY."

"The simplest mode of slinging a horse, and that which annoys him the least, at the same time that it affords him every opportunity of reposing himself that such a situation can, is to suspend him from a cross-beam by means of ropes and pulleys, connected with a very broad piece of sailcloth, spread underneath the animal's belly, which should be furnished with two breechings and two breast-girths (all broad and padded), in order to keep him from slipping out, either backwards or forwards. The ropes and pulleys (being a similar sort of apparatus to what sailors use for raising weights on board of ship) enable us to elevate or lower the animal at pleasure. In general it is not advisable to lift him quite off the ground. I have usually found my patient quietest and most at his ease when his feet have been suffered to touch the surface. At the same time, his head should be confined with two collar reins or ropes of considerable strength, and the head-stall itself should be well padded. Though horses in such strange situations may kick and plunge about a good deal at first, in general they are not long in becoming resigned to their trammels, and then turn altogether as quiet. The woodcut will serve to convey sufficient notion of what this slinging or suspensory apparatus should consist, as well as of its mode of application, to enable any person to fit up tackle of the kind. The additional breeching and breast-girth attached to the rings upon the sides of the belly-cloth, will be found to contribute much to the comfort as well as security of the animal. The padded strap or web, carried over the hind part of the neck, will prove serviceable in preventing the breast-girths from slipping down."



Fig. 22.

| | £ | s. | d. |
|---|---|----|----|
| Weston's Patent Pulley Blocks for Slings | 2 | 10 | 0 |
| Horse Slings, Arnold and Sons' newly improved, with every improvement, the leather work of extra quality and strength, Weston's patent pulley blocks, tested to 1 ton | 9 | 9 | 0 |
| Sling Frames to order | | | |

ECRASEURS.

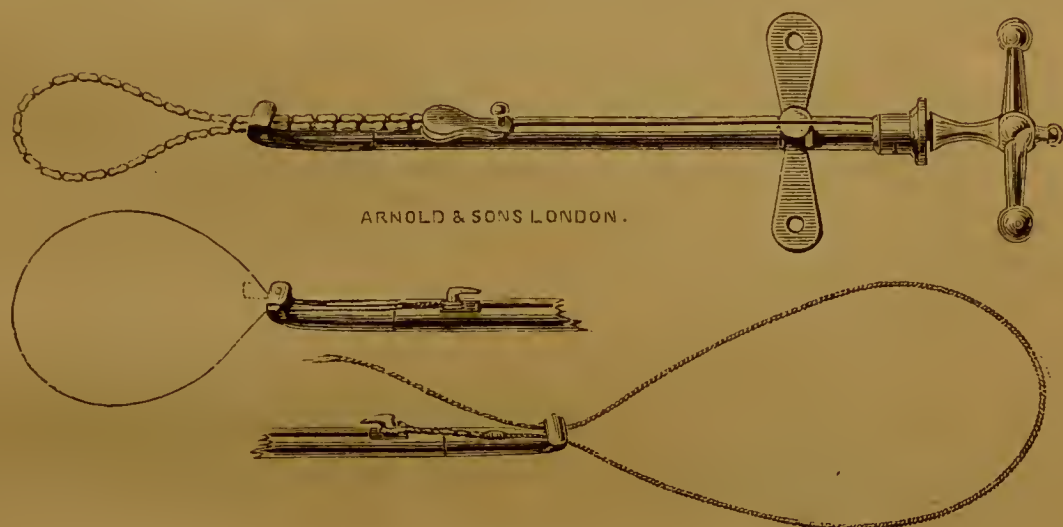


Fig. 23.

| | | | |
|--|---|----|---|
| Ecraseur, by Prof. Robertson, small size, with chain .. | 3 | 10 | 0 |
| „ „ „ medium „ .. | 4 | 4 | 0 |
| „ „ „ large „ .. | 5 | 5 | 0 |
| „ „ „ for using with either chain, rope, or wire, complete in mahogany case, Fig. 23 | 6 | 0 | 0 |
| „ by Professor Pritchard (Patented) | 6 | 6 | 0 |

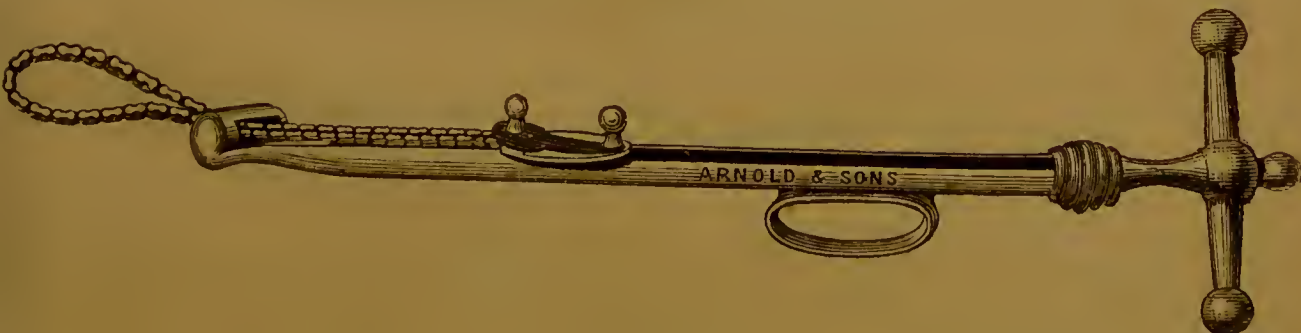


Fig. 24.

| | | | |
|---|---|----|---|
| Ecraseur, Farmer Miles' pattern, guaranteed, Fig. 24 .. | 3 | 10 | 0 |
| „ „ „ extra strong | 4 | 4 | 0 |

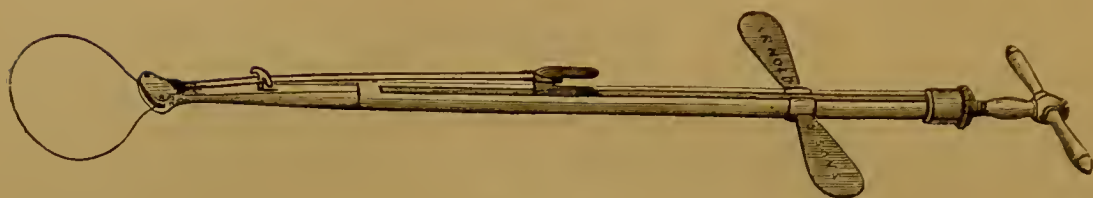


Fig. 25.

| | £ | s. | d. |
|--|---|----|----|
| Ecraseur, with wire, A. and Sons' improved, as recommended by Mr. Fleming, Fig. 25 | 3 | 3 | 0 |

EXTRACT FROM "VETERINARY JOURNAL," DECEMBER, 1881.

"I cannot speak too highly of my first trial of the single steel-wire ecraseur. Without it operation in this case could not have been ventured upon, and the manner in which it cut through tissue that nothing but a chisel could have touched, but which it would have been the height of folly to have tried, was something marvellous. It can certainly be commended, not only as by far the best polyptome in existence, but also for the removal of all dense tumours, supernumerary digits, limbs, &c., where the chain ecraseur would be either too thick, not sufficiently strong, or, from its too great flexibility, not capable of being passed into a narrow canal."

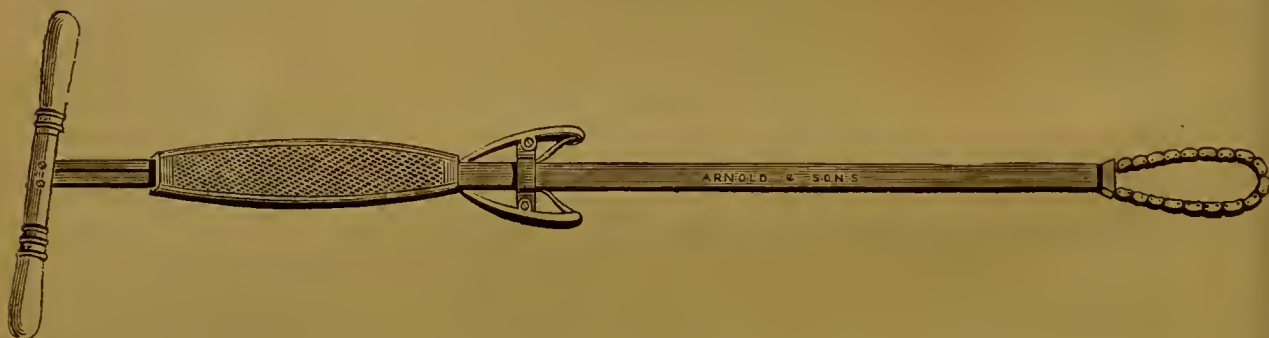


Fig. 26.

| | £ | s. | d. |
|--|---|----|----|
| Ecraseur, A. and Sons' improved, straight or curved, Fig. 26 | 3 | 3 | 0 |
| " " extra large, by Mr. Buckingham | 4 | 4 | 0 |
| " " for removing small tumours, etc. | 2 | 2 | 0 |
| " " " " polypi, etc. | 1 | 1 | 0 |
| Ecraseur Chains | 0 | 15 | 0 |
| " wires | 0 | 2 | 0 |
| " wire ropes | 0 | 2 | 0 |

NOTE.—All the above *Ecraseurs* we guarantee our own manufacture, and superior in every respect to either American or German make.

CLAMS AND CASTRATING INSTRUMENTS.

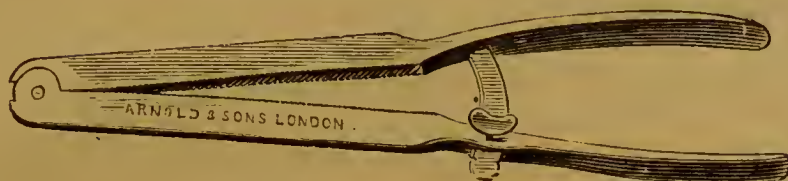


Fig. 27.

| | | | | | |
|--|---|----|---|----|----|
| | | | £ | s. | d. |
| Castrating Clams, improved by Professor Robertson, Fig. 27 | 0 | 17 | 6 | | |



Fig. 28.

| | | | | |
|--|----|---|----|---|
| Castrating Clams, with spring regulating rack, Fig. 28 | .. | 0 | 15 | 0 |
| „ „ „ slide on handles | .. | 0 | 12 | 6 |

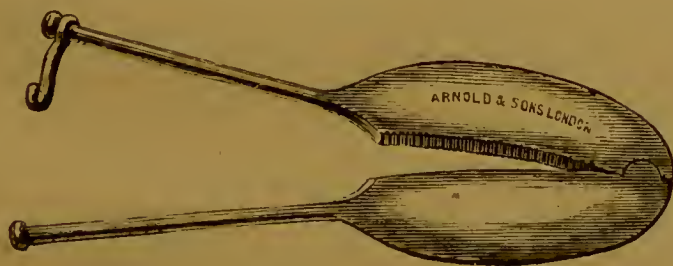


Fig. 29.

| | | | | |
|---|----|---|---|---|
| Castrating Clams, with spoon-shaped blades, Fig. 29 | .. | 1 | 1 | 0 |
| „ „ boxwood, improved by Prof. Varnell | .. | 0 | 7 | 6 |
| „ „ with regulating screw, for equal pressure | .. | 1 | 4 | 0 |
| „ „ Wallis's improved (for Caustic) | .. | 0 | 3 | 6 |
| Forceps for Closing | .. | 0 | 7 | 6 |

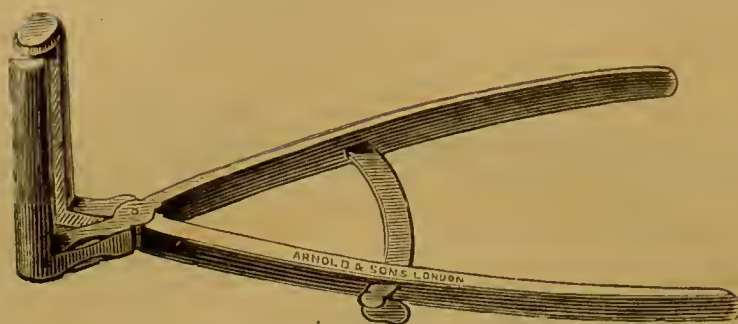


Fig. 30.

| | £ | s. | d. |
|---|---|----|----|
| Castrating Forceps, Torsion, Professor Robertson's, Fig. 30 | 1 | 1 | 0 |
| " " " with slide | 1 | 1 | 0 |
| " " " for Dogs, Prof. Robertson's.. | 1 | 1 | 0 |

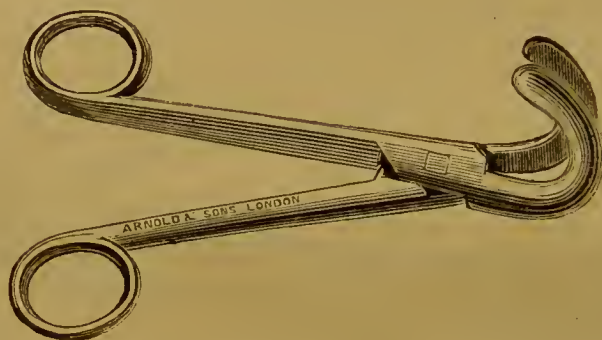


Fig. 31.

| | | | |
|--|---|---|---|
| Castrating Forceps for Lambs, Fig. 31 | 0 | 7 | 6 |
| Castrating Hobbles, A. and Sons' improved, complete .. | 2 | 2 | 0 |
| Spaying Knife, with spring back, horn handle | 0 | 3 | 6 |
| Castrating Knife, common | 0 | 1 | 6 |



Fig. 32.

| | | | |
|---|---|---|---|
| Castrating Knife, with spring back, in horn handle, Fig. 32 | 0 | 3 | 6 |
| " " extra large | 0 | 4 | 6 |

ARNOLD AND SONS, LONDON.

19

| | £ | s. | d. |
|--|---|----|----|
| Castrating Knife, with French catch in ivory handle .. | 0 | 7 | 6 |
| “ “ with opening at top for needles, &c. .. | 0 | 5 | 6 |
| “ “ improved by Mr. Matthews .. | 0 | 7 | 6 |



Fig. 33.

| | | | |
|--|---|---|---|
| Castrating Iron, in fixed handle, Fig. 33 .. | 0 | 3 | 6 |
| “ “ for socket handle .. | 0 | 3 | 6 |
| Socket Handle .. | 0 | 3 | 6 |



Fig. 34.

| | | | | |
|-----------------------------|-------------------------|---|----|---|
| Torsion Forceps, Fig. 34 .. | 10s. 6d., 12s. 6d., and | 0 | 15 | 0 |
|-----------------------------|-------------------------|---|----|---|



Fig. 35.

| | | | |
|--|---|---|---|
| Castrating and Spaying Knife, Farmer Miles' pattern, Fig. 35 | 1 | 0 | 0 |
|--|---|---|---|

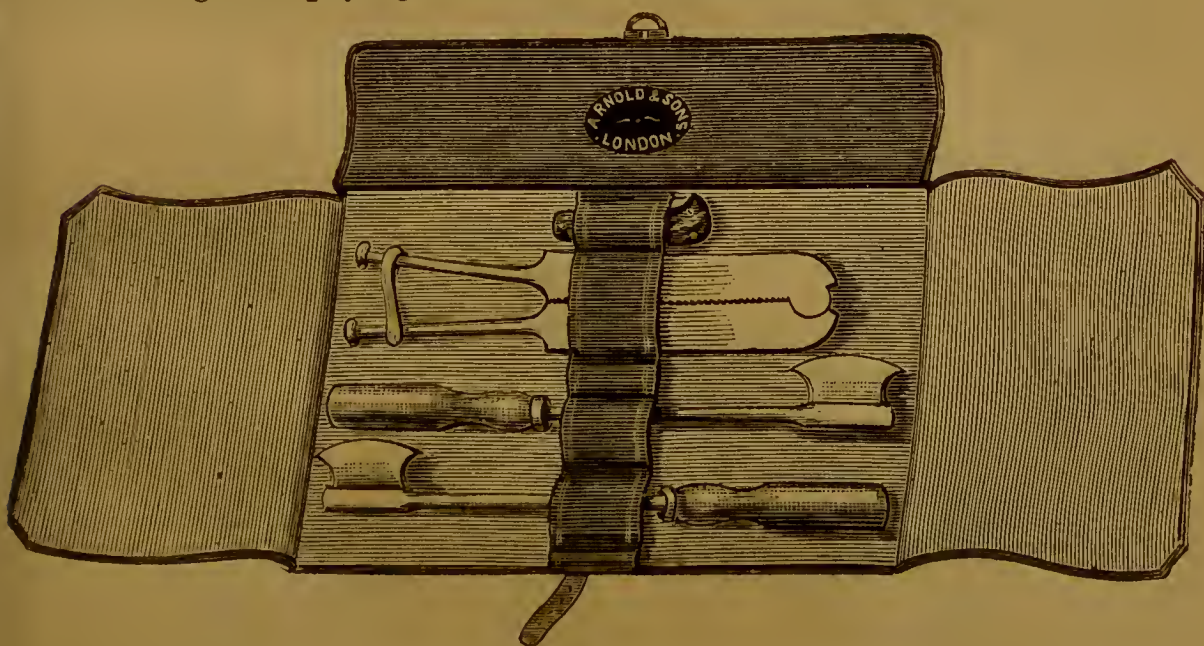


Fig. 36.

| | | | |
|--|---|----|---|
| Castrating Instruments, in leather case, containing Clams, Knife, and 2 Irons, complete, Fig. 36 .. | 1 | 14 | 0 |
|--|---|----|---|

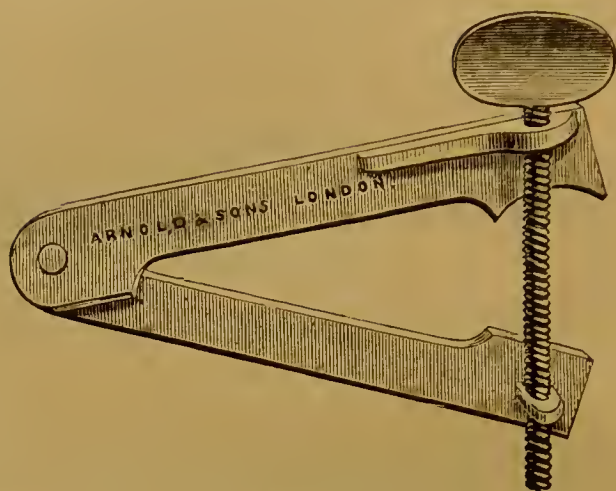


Fig. 37.

Hernia Clam, Steel, for umbilical hernia, improved by Mr. Methereil, Fig. 37

£ s. d.
0 15 0

EXTRACT FROM "VETERINARY JOURNAL," 1881.

"This instrument, for umbilical hernia, is almost unique in its simplicity, and is composed of two stout blades of steel, which work upon a pivot, and close upon each other, something like scissors. It is furnished with two eyes, one movable, for a rather long screw to pass through, which produces splendid pressure.

"The mode of operating upon the colt or yearling is as follows :— The animal being fastened and placed in a suitable building with beams, has the fore-legs tied together, and then the hind ones; but there is no connection between the hind and fore cords; they should be kept separate. The hooks of two single pulleys working from above, are then attached to hind and fore cords respectively, when, with a pull altogether, the animal is cast with hind and fore-legs separate, and far apart out of the way. The operator then grasps the hernial sac with his left hand, raising it well up, and passes about three ordinary wire skewers, four inches long, through it, pretty close to the abdomen, but avoids wounding any viscera. A strong waxed thread is passed round under the skewers, and tied tightly to keep them in position, and the clams placed over all and screwed home. The patient is turned away to grass, the clams being found some days after on the ground. The cure is complete, and the patient shows no ill effects. Tetanus rarely supervenes. I never knew a case. Messrs. Arnold have had patterns of the instruments, and now keep them in stock."

Hernia Clams, with screw-key

0 15 0

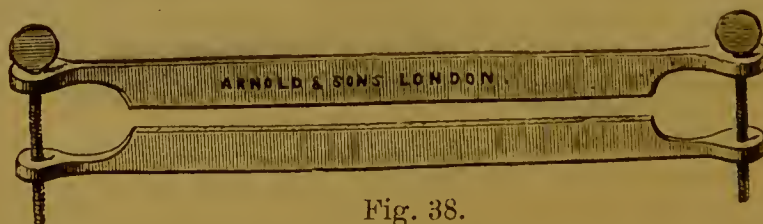


Fig. 38.

Hernia Clam, steel, by Prof. Pritchard, Fig. 38 ..

1 1 0

Clam for taking off warts

1 5 0

Clamp for Hernia

0 10 0

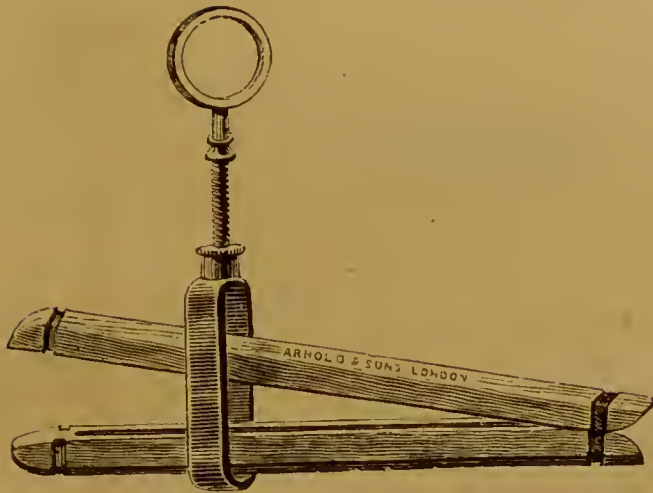


Fig. 39.

| | | | £ | s. | d. |
|--|----|----|---|----|----|
| Caustic Clams and Clamp, improved by Mr. Gowing, 2 | | | | | |
| clams and 1 clamp, the set, Fig. 39 | .. | .. | 0 | 10 | 0 |
| Clamp for closing the caustic clams | .. | .. | 0 | 6 | 0 |



Fig. 40.

| | | | | | | |
|--|----|----|----|---|----|---|
| Caustic Clam, screw, improved by Mr. Metherell, for castrating Bulls, Rams, &c., Fig. 40 | .. | .. | .. | 0 | 15 | 0 |
|--|----|----|----|---|----|---|

EXTRACT FROM "VETERINARY JOURNAL," APRIL, 1881.

"This instrument consists of the ordinary caustic clams, but with a strong hinge at one end instead of being tied with string; and at the other two holes are drilled for a small screw to work through. When one or both cords are enclosed in the clams, intense pressure is brought to bear upon the parts by means of the screw, enabling the operator, without assistance, to tie the clams prior to removing the screw; whereas, in the old way, an assistant had to close the clams upon the cord with a pair of pincers, and so hold on tight until both ends of the clams were tied; which mode is far from satisfactory, as well as being clumsy and unscientific."

| | | | | | | | |
|-----------------------------|----|----|----|------|---|---|---|
| Caustic Clam, by Mr. Gowing | .. | .. | .. | each | 0 | 2 | 0 |
| " " by Prof. Varnell | .. | .. | .. | .. | 0 | 2 | 6 |
| " " plain pattern, to tie | .. | .. | .. | .. | 0 | 1 | 6 |
| " " with hinge | .. | .. | .. | .. | 0 | 2 | 6 |

POCKET INSTRUMENTS.

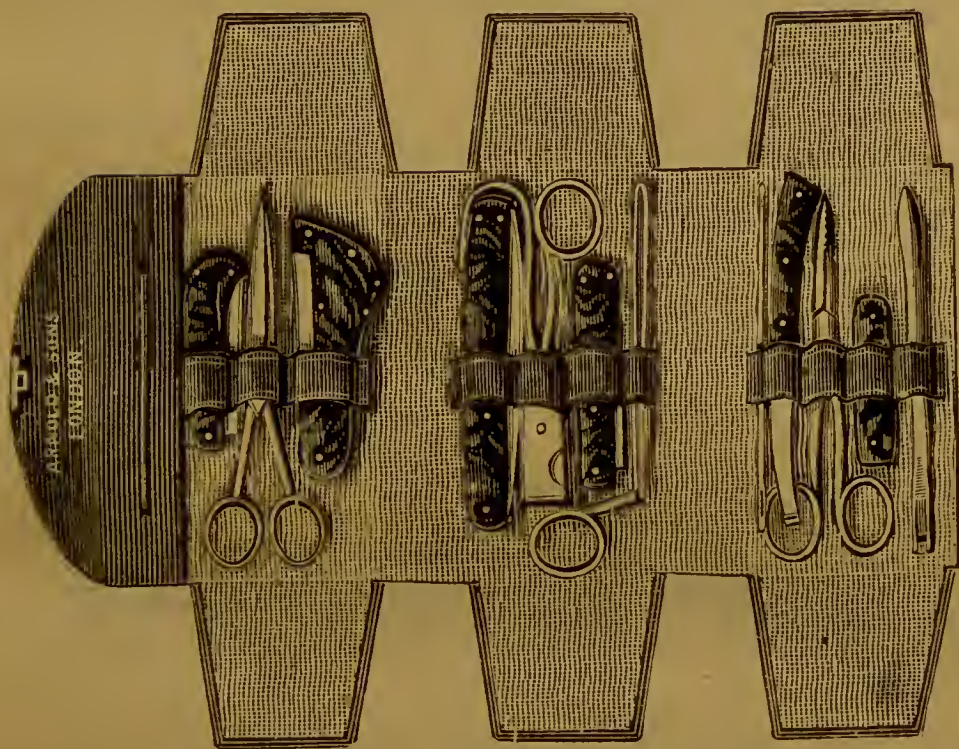


Fig. 44.

| | £ | s. | d. |
|---|---|----|----|
| Morocco Leather Case, lined with silk velvet, containing drawing knife, bow dressing forceps, seton needle, scalpel, silver probe, foot lancet, rowelling bistoury, probe-pointed bistoury, improved back fleam, dressing scissors, castrating knife, director, ½-doz. suture needles. The above in horn handles, complete, Fig. 44 | 2 | 10 | 0 |
| „ „ instruments with French catch and ivory handles | 4 | 4 | 0 |
| Empty Pocket Cases.. | 0 | 15 | 0 |
| New Pattern Army Regulation Pouch | 4 | 15 | 6 |
| Empty Army Regulation Pouches | | | |
| „ „ „ with belt attached | | | |



Fig. 45.

| | |
|--|---------|
| | £ s. d. |
| Operating Knife, with spring back and French catch, in tortoiseshell, in leather case, by Mr. Gowing, Fig. 45 .. | 0 7 6 |

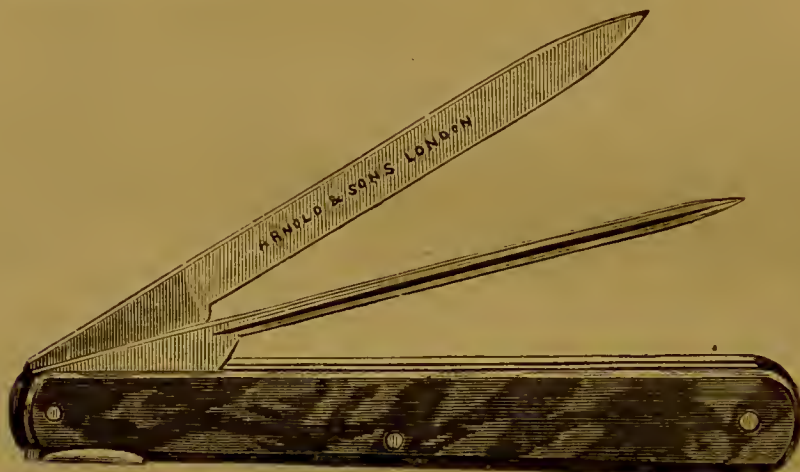


Fig. 46.

| | |
|--|--------|
| Exploring Needle and Abscess Knife combined, with spring back and French catch, in tortoiseshell, in leather case, by Mr. Gowing, Fig. 46 .. | 0 10 6 |
|--|--------|



Fig. 47.

| | |
|--|-------|
| Abscess Knife, in spring back, horn handle, Fig. 47 .. | 0 4 6 |
|--|-------|



Fig. 48.

| | £ | s. | d. |
|--|---|----|----|
| Gum Lancet, by Mr. Gowing, Fig. 48 | 0 | 10 | 6 |
| Gum Lancet, with spring back, in horn handle | 0 | 5 | 6 |
| " " " extra large | 0 | 7 | 6 |
| Lampus Gum Lancet, shut up, for the pocket-case | 0 | 5 | 6 |
| Aneurism Needle | 0 | 3 | 6 |
| Bistoury, curved (sharp or probe-pointed), in horn handle | 0 | 5 | 6 |
| " straight " " " " " | 0 | 5 | 0 |
| Bow or Dressing Forceps | 0 | 2 | 6 |

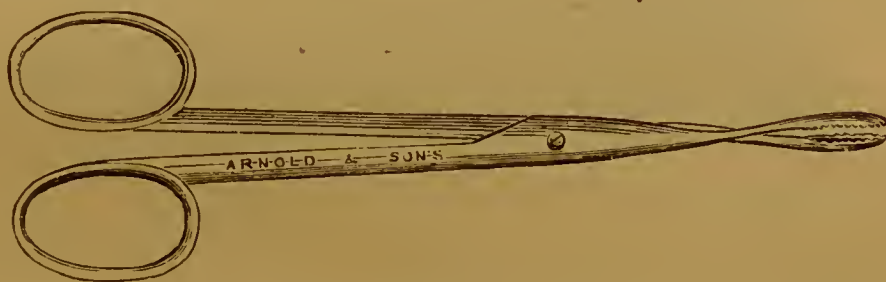


Fig. 49.

| | | | |
|---|---|---|---|
| Bow or Dressing Forceps, A. and Sons' improved, Fig. 49 | 0 | 4 | 6 |
| Steel Director, with bow | 0 | 2 | 0 |
| Director, silver | 0 | 4 | 6 |
| " German silver | 0 | 2 | 6 |
| Probe, Silver, for pocket-case | 0 | 1 | 6 |
| " Spiral Wire (flexible) | 0 | 2 | 6 |
| " Metallic, various lengths | 0 | 1 | 6 |
| " Whalebone per inch | 0 | 0 | 2 |



Fig. 50.

| | | | |
|---|---|---|---|
| Pocket Scalpel, with spring back, in horn handle, Fig. 50 | 0 | 3 | 6 |
|---|---|---|---|

| | £ | s. | d. |
|---|---|----|----|
| Pocket Scalpel, with spring back, in horn handle, extra large | 0 | 4 | 6 |
| " " " and French catch, in ivory handle | 0 | 7 | 6 |
| Skinning Knife, in fixed handle | 0 | 2 | 6 |
| " " with spring back and French catch .. | 0 | 3 | 6 |

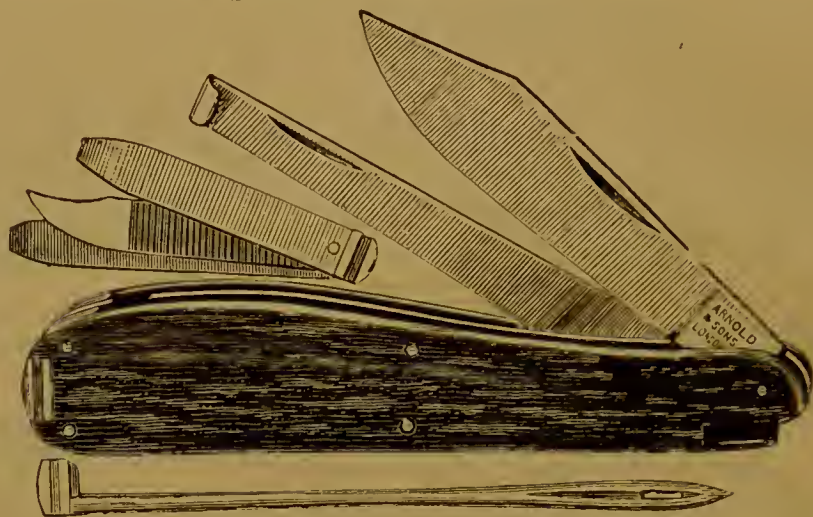


Fig. 51.

| | | | |
|--|---|----|---|
| Portable Pocket Knife, in buckhorn handle and French catch, with scalpel, searcher, lancet, forceps, and needle, Fig. 51 | 0 | 15 | 0 |
| Tubular Needle, by Mr. Field | 0 | 8 | 6 |
| " " double, in tortoiseshell and French catch .. | 0 | 12 | 6 |



Fig. 52.

| | | | |
|---|---|---|---|
| Artery Forceps, or Bull-dogs, Fig. 52 | 0 | 2 | 6 |
|---|---|---|---|



Fig. 53.

| | | | |
|--|---|---|---|
| Artery Forceps, with A. and Sons' improved spring, Fig. 53 | 0 | 5 | 0 |
|--|---|---|---|



Fig. 54.

| | | | |
|---|---|---|---|
| Artery Forceps, improved, Fig. 54 | 0 | 7 | 6 |
|---|---|---|---|



Fig. 55.

| | | | | | | £ | s. | d. |
|-------------------------|----|----|----|----|----|---|----|----|
| Artery Forceps, Fig. 55 | .. | .. | .. | .. | .. | 0 | 7 | 6 |

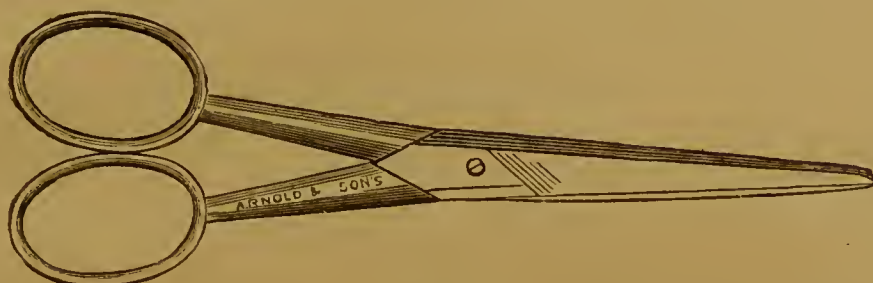


Fig. 56.

| | | | | |
|---|----|---|---|---|
| Dressing Scissors for pocket-case, open shanks, Fig. 56 | .. | 0 | 2 | 6 |
|---|----|---|---|---|



Fig. 57.

| | | | | | | | | |
|--|----|----|----|----|----|---|---|---|
| Dressing Scissors for pocket-case, close shanks, probe or sharp-pointed, Fig. 57 | .. | .. | .. | .. | .. | 0 | 3 | 6 |
|--|----|----|----|----|----|---|---|---|



Fig. 58.

| | | | | |
|---|----|---|---|---|
| Dressing Scissors for pocket-case, curved, small, Fig. 58 | .. | 0 | 3 | 6 |
|---|----|---|---|---|

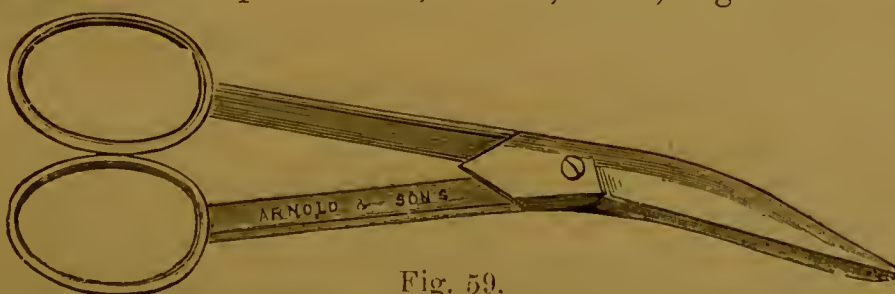
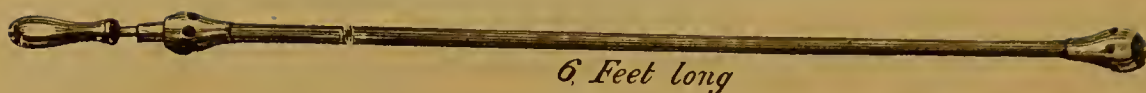


Fig. 59.

| | | | | |
|---|----|---|---|---|
| Dressing Scissors for pocket-case, curved, large, Fig. 59 | .. | 0 | 4 | 6 |
|---|----|---|---|---|

PROBANGS AND GAGS.



6 Feet long

Fig. 60.

| | £ | s. | d. |
|---|---|----|----|
| Cattle Probang (Monroe's), spiral wire, covered with leather, and whalebone stilette, Fig. 60 | 1 | 1 | 0 |
| " " with gag, complete | 1 | 3 | 6 |
| " " with cane stilette | 0 | 16 | 0 |
| " " with gag, complete | 0 | 18 | 6 |
| Cattle Probang, fitted with corkscrew | 1 | 7 | 6 |
| " " (Prof. Varnell's), unscrews for portability | 1 | 10 | 0 |
| " " with spring forceps for withdrawing, as supplied to the Indian Government | 2 | 2 | 0 |
| Calf Probang (Monroe's) | 0 | 10 | 0 |
| Sheep | 0 | 8 | 0 |
| Horse Probang, whalebone | 0 | 10 | 0 |
| " " to unscrew for portability | 0 | 15 | 0 |
| Balling for giving balls to colts, &c., plain wood | 0 | 2 | 6 |
| " " polished | 0 | 3 | 6 |
| " " boxwood | 0 | 5 | 0 |
| " " spiral wire, covered with leather | 0 | 7 | 6 |



Fig. 61.

| | | | |
|---|---|---|---|
| Balling Probang, A. and Sons' improved, boxwood, bound with steel bands, and steel rod, as made for the Army, Fig. 61 | 0 | 9 | 6 |
|---|---|---|---|

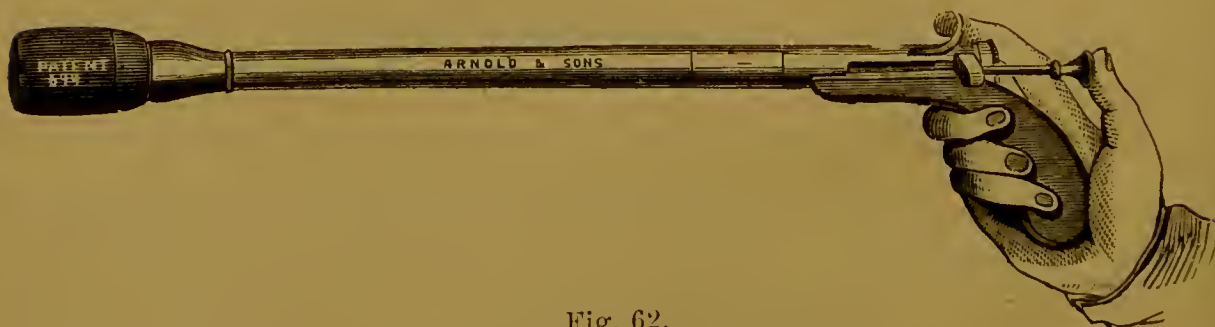


Fig. 62.

| | | | |
|--|---|----|---|
| Balling Probang, A. and Sons' patent, with spring rod and india-rubber mouthpiece, Fig. 62 | 0 | 15 | 0 |
|--|---|----|---|

It can be used with one hand, is noiseless in action, does not alarm the animal, and the cup-piece being of india-rubber, it is impossible to injure the mouth.

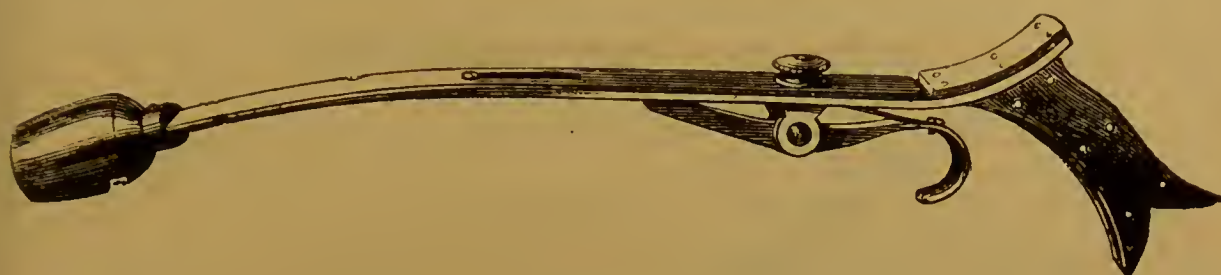


Fig. 63.

| | | | | | £ | s. | d. |
|-------------------------------------|----|----|----|----|---|----|----|
| Balling Probang, Goodwin's, Fig. 63 | .. | .. | .. | .. | 1 | 10 | 0 |
| „ „ for Dogs | .. | .. | .. | .. | 0 | 1 | 0 |

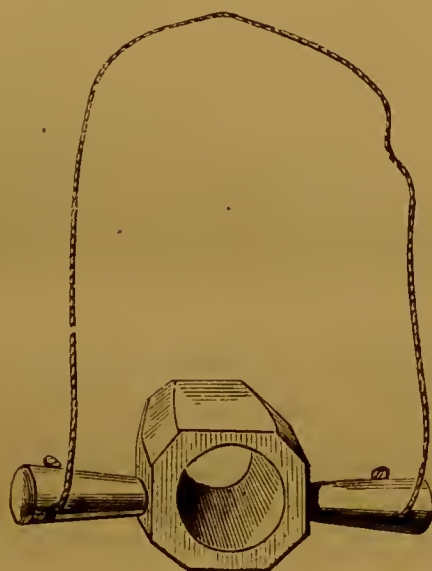


Fig. 64.

| | | | | | | |
|---|----|----|----|---|---|---|
| Mouth Gag, by Mr. Armatage, Fig. 64 | .. | . | .. | 0 | 2 | 6 |
| „ with straps | .. | .. | .. | 0 | 2 | 6 |
| „ ebony | .. | .. | .. | 0 | 5 | 0 |
| „ beech | .. | .. | .. | 0 | 1 | 0 |
| „ for sheep | .. | .. | .. | 0 | 2 | 0 |
| „ improved, with regulating screw covered with india-rubber to protect the gums, by Prof. Varnell | .. | .. | .. | 1 | 1 | 0 |

DOCKING INSTRUMENTS.

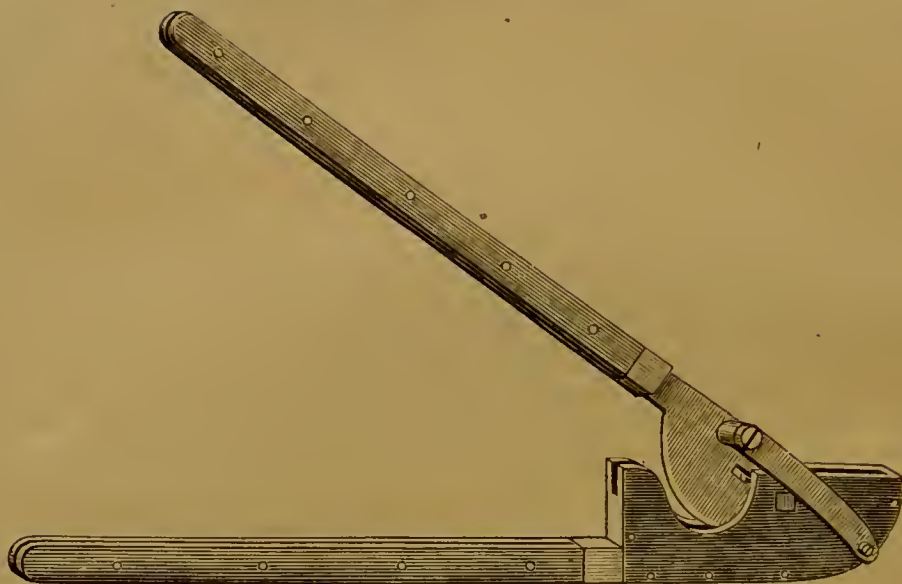


Fig. 65.

£ s. d.

Improved Docking Machine, by Mr. James McKenny, V.S.,
 which has been patented, and is now offered as the most
 effective instrument for this purpose, Fig. 65

2 2 0

The advantages claimed for this machine are :—

- 1st.—A forward motion is given to the knife by a slot made in the blade, moving on a fixed pin, thus giving a shearing cut instead of the squeezing effect of an ordinary docker.
- 2nd.—Great ease in use, performing the operation rapidly, and with less exertion.
- 3rd.—Less pain to the animal.

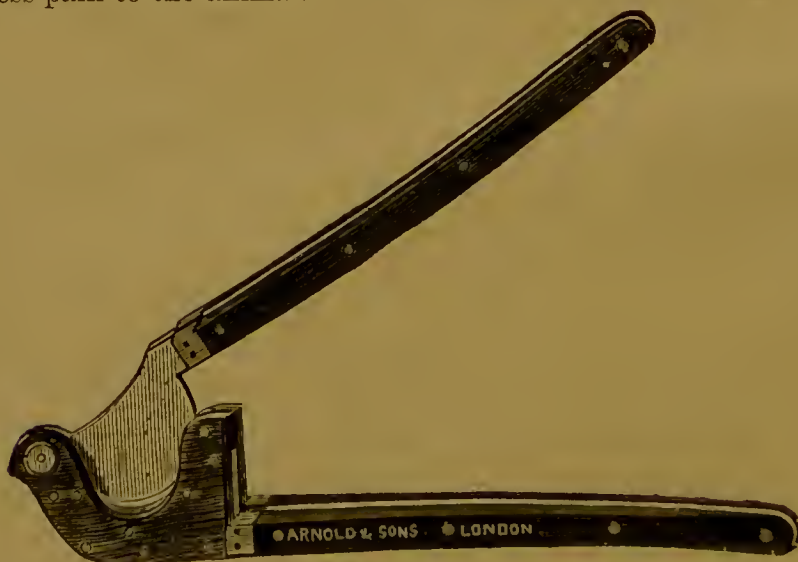


Fig. 66.

| | £ | s. | d. |
|--|---|----|----|
| Docking Machine, A. and Sons' improved, in rosewood handles, very portable and powerful, Fig. 66 | 1 | 10 | 0 |
| „ „ „ in plain wood handles | 0 | 17 | 6 |
| „ Machine and 2 tail irons, in leather case | 2 | 10 | 0 |
| „ Instruments, complete set, in leather case, with handles to unscrew for portability | 3 | 0 | 0 |



Fig. 67.

| | | | |
|--|---|---|---|
| Docking or Searing Iron, Fig. 67 | 0 | 5 | 0 |
|--|---|---|---|

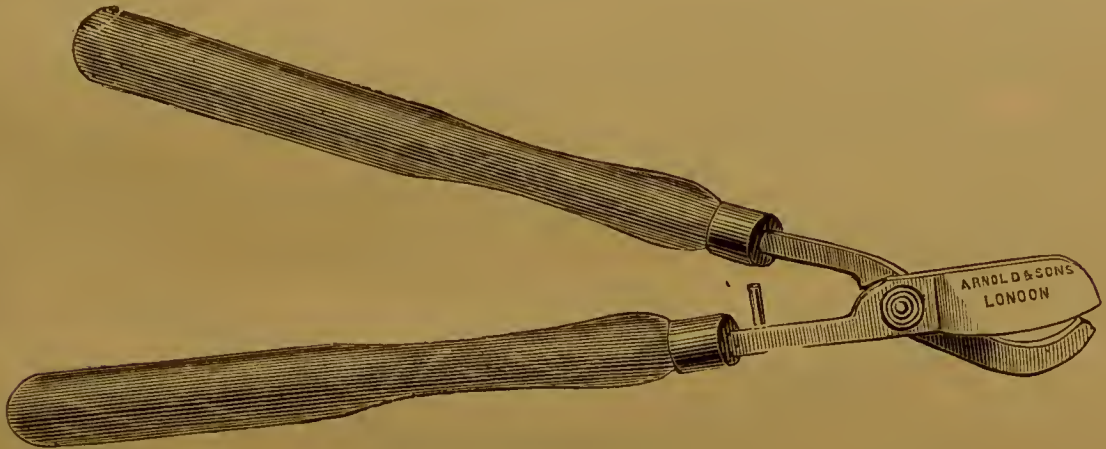


Fig. 68.

| | | | |
|---|---|----|---|
| Tail Shears, for squaring the tail, A. and Sons' improved, with wooden handles, Fig. 68 | 1 | 10 | 0 |
| Patent Tail Cutter, for squaring the tail | 1 | 1 | 0 |
| Tail Scissors | 0 | 7 | 6 |

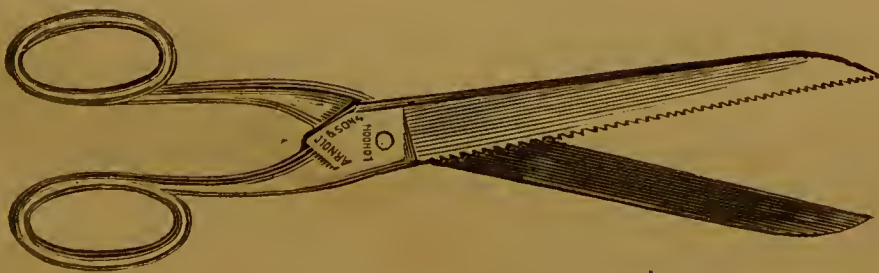


Fig. 69.

| | | | |
|---|---|----|---|
| Tail Scissors, A. & Sons' improved, serrated, to prevent the hair slipping, Fig. 69 | 0 | 10 | 6 |
|---|---|----|---|

SETONING INSTRUMENTS.



Fig. 70.

| | | | | | £ | s. | d. |
|---|----|----|----|----|---|----|----|
| Rowelling Bistoury, Fig. 70 | .. | .. | .. | .. | 0 | 6 | 6 |
| „ Scissors | .. | .. | .. | .. | 0 | 3 | 0 |
| Seton Needles, complete set, in mahogany case | .. | .. | .. | .. | 1 | 15 | 0 |
| Hock Seton Needle, 10 inches long | .. | .. | .. | .. | 0 | 3 | 6 |
| „ „ with handle | .. | .. | .. | .. | 0 | 6 | 6 |
| Frog Seton Needle | .. | .. | .. | .. | 0 | 2 | 6 |



Fig. 71.

| | | | | | | | |
|---|----|----|----|----|---|----|---|
| Frog Seton Needle, Prof. Varnell's side curved, Fig. 71 | .. | .. | .. | .. | 0 | 3 | 0 |
| Dewlap Seton Needle | .. | .. | .. | .. | 0 | 3 | 0 |
| Seton Needle for dogs | .. | .. | .. | .. | 0 | 2 | 0 |
| „ improved by Prof. Morton, for medicated Cotton | .. | .. | .. | .. | 0 | 5 | 6 |
| „ portable folding | .. | .. | .. | .. | 0 | 7 | 6 |
| „ folding in 2 pieces | .. | .. | .. | .. | 0 | 10 | 6 |
| „ „ 3 „ | .. | .. | .. | .. | 0 | 12 | 6 |
| „ with guarded slide to cut any depth | .. | .. | .. | .. | 0 | 18 | 0 |
| „ small, for pocket-case | .. | .. | .. | .. | 0 | 2 | 0 |
| „ in buffalo handle | .. | .. | .. | .. | 0 | 4 | 6 |
| „ 6 inches long | .. | .. | .. | .. | 0 | 2 | 0 |
| „ 7 „ | .. | .. | .. | .. | 0 | 2 | 6 |
| „ 8 „ | .. | .. | .. | .. | 0 | 3 | 0 |
| „ 9 „ | .. | .. | .. | .. | 0 | 3 | 0 |
| „ 10 „ | .. | .. | .. | .. | 0 | 3 | 6 |
| „ 11 „ | .. | .. | .. | .. | 0 | 4 | 6 |
| „ 12 „ | .. | .. | .. | .. | 0 | 5 | 0 |
| „ 13 „ | .. | .. | .. | .. | 0 | 5 | 6 |
| „ 14 „ | .. | .. | .. | .. | 0 | 6 | 0 |
| „ 15 „ | .. | .. | .. | .. | 0 | 7 | 0 |
| „ 16 „ | .. | .. | .. | .. | 0 | 7 | 6 |



Fig. 72.

| | | | £ | s. | d. |
|---|-----|------------|---|----|----|
| Seton Needle, with screw handle, Fig. 72 | .. | .. | 0 | 6 | 6 |
| „ Handle, with screw | .. | .. | 0 | 3 | 6 |
| Seton Knife, with French catch, by Mr. Nelson | ... | .. | 0 | 5 | 6 |
| Medicated Seton Cord, by Mr. Morton | .. | .. per lb. | 0 | 19 | 0 |

FIRING, BUDDING IRONS, ETC.



Fig. 73.

| | | | | | | | |
|--|----|----|----|----|---|----|---|
| Firing Iron in fixed handle | .. | .. | .. | .. | 0 | 3 | 6 |
| „ for socket handle | .. | .. | .. | .. | 0 | 3 | 6 |
| „ with screw socket handle, Fig. 73 | .. | .. | .. | .. | 0 | 7 | 0 |
| „ (navicular), by Mr. Robinson | .. | .. | .. | .. | 0 | 5 | 0 |
| Screw Handle, for socket firing iron | .. | .. | .. | .. | 0 | 3 | 6 |
| Mahogany Case, containing 6 socket firing irons and 2 socket handles, complete | .. | .. | .. | .. | 1 | 10 | 0 |



Fig. 74.

| | | | | | | | |
|--|----|----|------------------------|------|---|----|---|
| Budding Iron, Fig. 74 | .. | .. | .. | .. | 0 | 3 | 6 |
| Lampus Iron | .. | .. | .. | .. | 0 | 5 | 0 |
| Cauterising Irons, various shapes | .. | .. | .. | each | 0 | 4 | 6 |
| Pyro Puncture Iron | .. | .. | 7s. 6d., 10s. 6d., and | .. | 0 | 15 | 0 |
| Thermo-Cautery, improved by Prof. Pritchard, with double platina instrument for firing, etc., complete in case | .. | .. | .. | .. | 6 | 10 | 0 |

Vide "VETERINARY JOURNAL," FEBRUARY, 1880.

TRACHEOTOMY INSTRUMENTS.

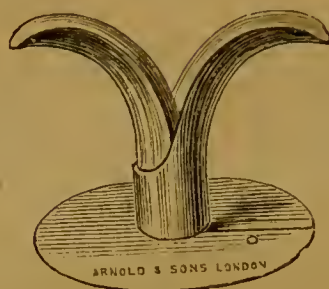


Fig. 75.

Tracheotomy Tube, self-retaining, requires no strap or other fastening, by Mr. Field, nickel silver-plated, in three sizes, Fig. 75 each

£ s. d.

0 15 0



Fig. 76.

'Tracheotomy Tube, A. and Sons' improved, Fig. 76

.. 0 4 0

with straps, complete

0 6 0

by Professor Spooner..

$$\dots \quad 1 \quad 10 \quad 0$$

by Mr. J. Roalfe Cox

$$\dots \quad 0 \quad 10 \quad 0$$

" " vulcanite, by Mr. Gowing

.. 0 9 0

32 33 common

.. 0 3 6

Trocar and Canula, by Mr. Gowing

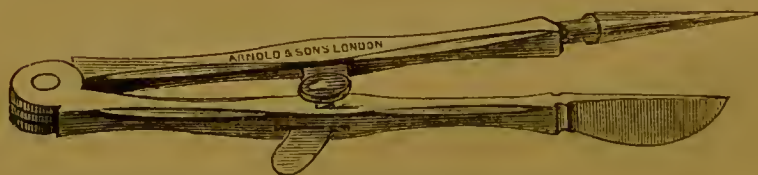
$$\begin{pmatrix} 1 & 1 & 0 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix}$$


Fig. 77.

Tracheotomy Forceps, regulating, for taking out any size piece of cartilage, by Prof. Spooner, Fig. 77

0 12 6

BALLING INSTRUMENTS.

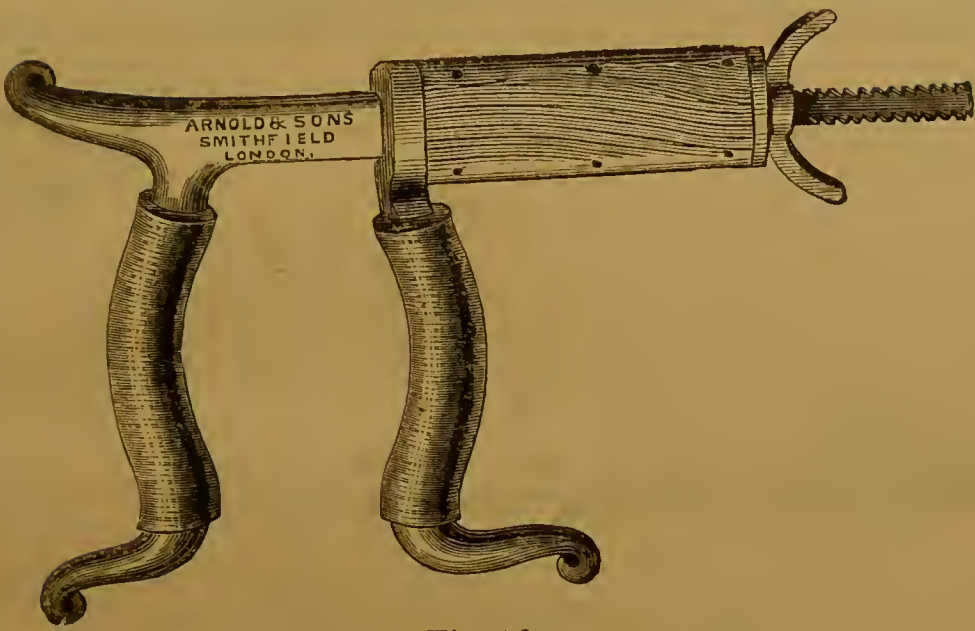


Fig. 78.

| | £ | s. | d. |
|---|---|----|----|
| Balling Iron, improved, with regulating screw, covered with india-rubber to protect the gums, by Prof. Varnell, Fig. 78 | 1 | 1 | 0 |

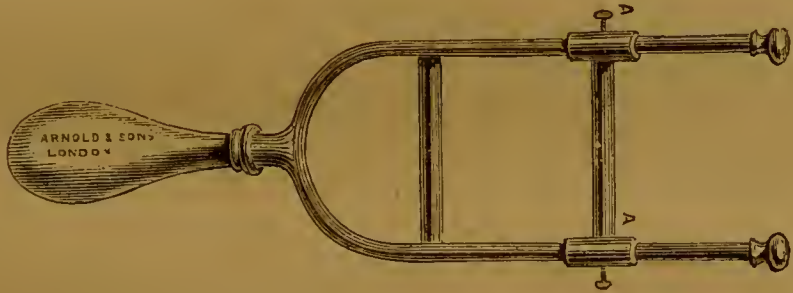


Fig. 79.

| | | | |
|--|---|----|---|
| Balling Iron, with sliding parallel bar, improved by Prof. Fearnley, Fig. 79 | 2 | 2 | 0 |
| „ by Prof. Armatage | 1 | 1 | 0 |
| „ circular | 0 | 5 | 0 |
| „ open sided | 0 | 7 | 6 |
| „ „ polished | 0 | 10 | 6 |

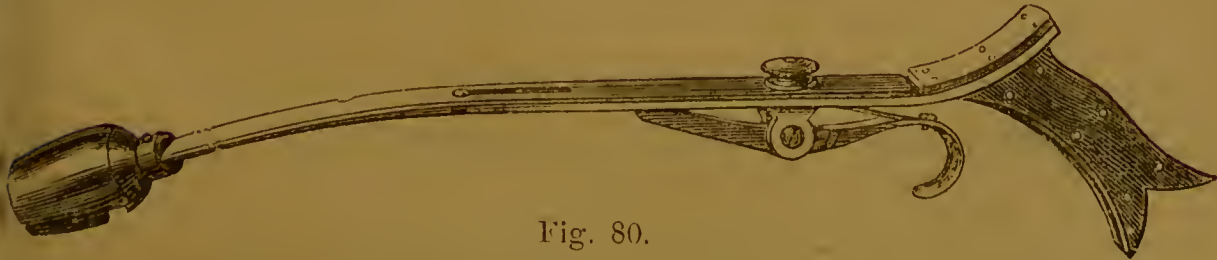


Fig. 80.

| | | | |
|--|---|----|---|
| Balling Probang (Goodwin's), Fig. 80 | 1 | 10 | 0 |
|--|---|----|---|

D 2

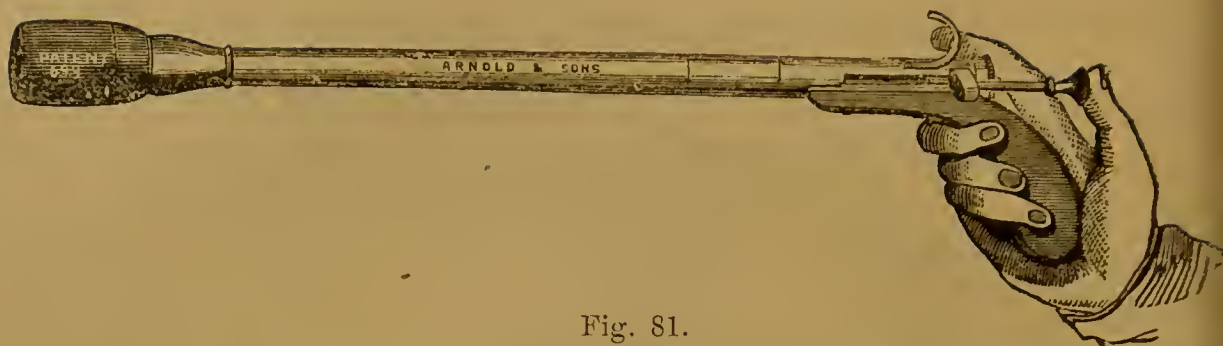


Fig. 81.

| | | | | | | |
|--|----|----|----|---|----|----|
| Balling Gun, A. and Sons' patent, with spring rod and india-rubber mouthpiece, Fig. 81 | .. | .. | .. | £ | s. | d. |
| | | | | 0 | 15 | 0 |



Fig. 82.

| | | | | | | | |
|---|----|-----|-------|----|----|---|---|
| Balling Gun, boxwood, with steel bands and steel rod, as made for the Army, Fig. 82 | .. | .. | .. | .. | 0 | 9 | 6 |
| „ spiral wire, covered with leather | .. | .. | .. | .. | 0 | 7 | 6 |
| „ boxwood | .. | .. | .. | .. | 0 | 5 | 0 |
| „ polished | .. | .. | .. | .. | 0 | 3 | 6 |
| „ plain wood | .. | .. | .. | .. | 0 | 2 | 6 |
| Ball Boxes, tin, to hold 6 horse balls | .. | per | gross | 1 | 16 | 0 | |
| „ „ 12 „ „ „ | .. | 2 | 8 | 0 | | | |
| „ to hold 6 horse balls, as made for the Royal Veterinary College | .. | per | gross | 0 | 18 | 0 | |
| „ „ 12 „ „ „ | .. | 1 | 4 | 0 | | | |

MEASURING STANDARDS, CATTLE GAUGES, ETC.

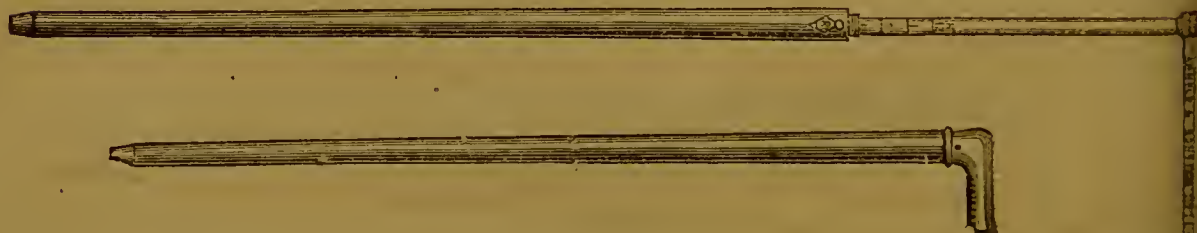


Fig. 83.

| | | | | |
|---|----|---|----|---|
| Walking-Stick Standard, A. & Sons' improved (Registered), for measuring the height of horses, &c. . . | .. | 1 | 1 | 0 |
| „ „ with silver band and spirit level, in rattan cane or malacca, very superior. Fig. 83 | .. | 1 | 10 | 0 |
| „ „ (Registered), for dogs, in malacca cane, very portable | .. | 1 | 4 | 0 |

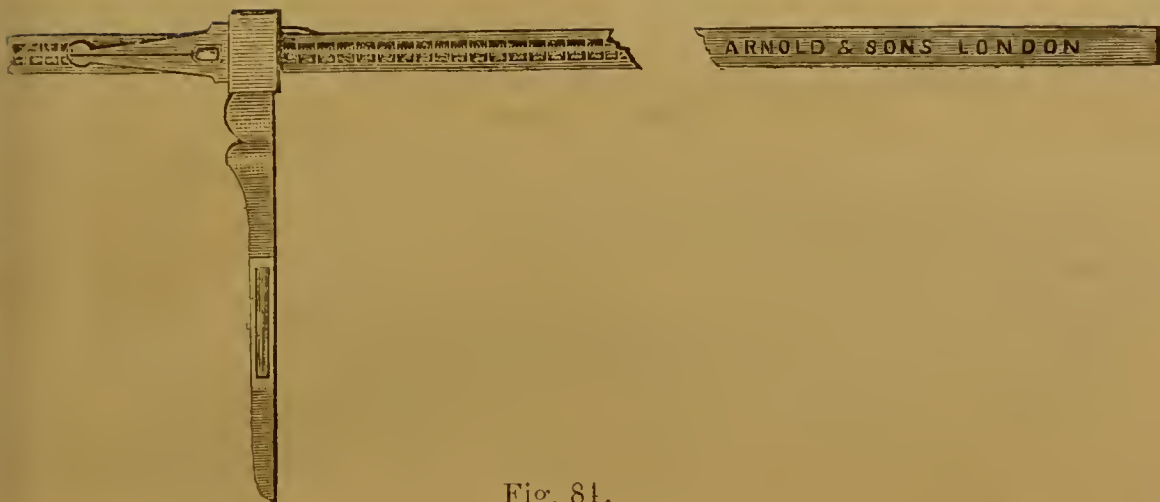


Fig. 84.

| | | £ | s. | d. |
|--|----------------|---|----|----|
| Measuring Standard as made for the Army, Fig. 84 | .. | 1 | 10 | 0 |
| „ „ for stable use | .. .. | 0 | 10 | 6 |
| „ „ „ very superior | .. .. | 1 | 1 | 0 |
| <i>Standards, engraved with Russian, Rhineland, and French measures.</i> | | | | |
| Standard Tape, with spring for the pocket | .. .. | 0 | 10 | 6 |
| Measure for Cattle, weights, &c., in leather case | .. .. | 0 | 12 | 6 |
| Cattle Gauge, Ewart's | 25s. and | 1 | 10 | 0 |
| „ „ for weighing oxen, sheep, and swine, | | | | |
| with key on slide rule principle | .. 4s. 6d. and | 0 | 7 | 6 |
| „ „ with ivory slide | .. 5s. 6d. and | 0 | 8 | 6 |
| „ „ with ivory rule and slide | 10s. and | 0 | 15 | 6 |
| „ „ with electrum slide | .. .. | 0 | 16 | 6 |
| „ for weighing carcases of live animals, in 3-inch | | | | |
| circular brass case, and 30 feet tape, with electrum | | | | |
| slide | .. .. | 1 | 5 | 0 |
| „ „ with logarithmic circle of natural | | | | |
| and square numbers on the reverse | .. .. | 1 | 10 | 0 |
| Chesterman's Patent Tapes, in spring cases | 3s. 6d. to | 0 | 5 | 6 |

TOOTH INSTRUMENTS.

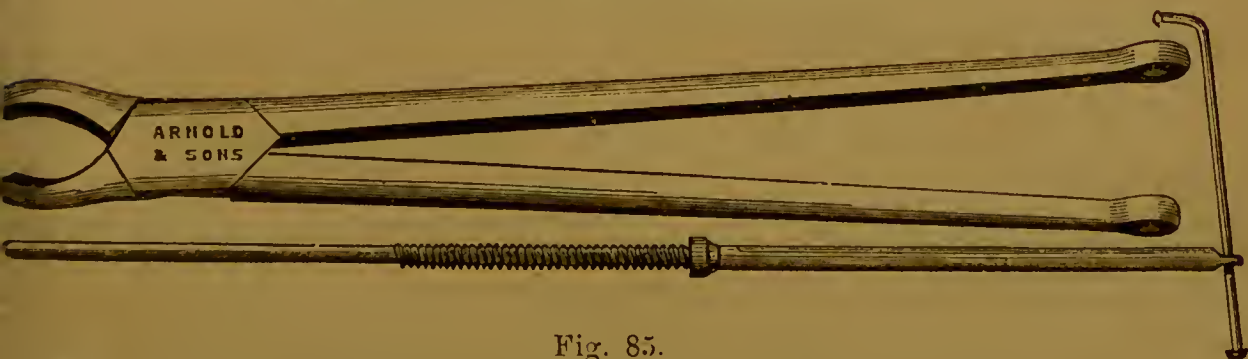


Fig. 85.

Tooth Forceps, steel, large, for the molars, by Mr. Gowing,

Fig. 85 3 3 0

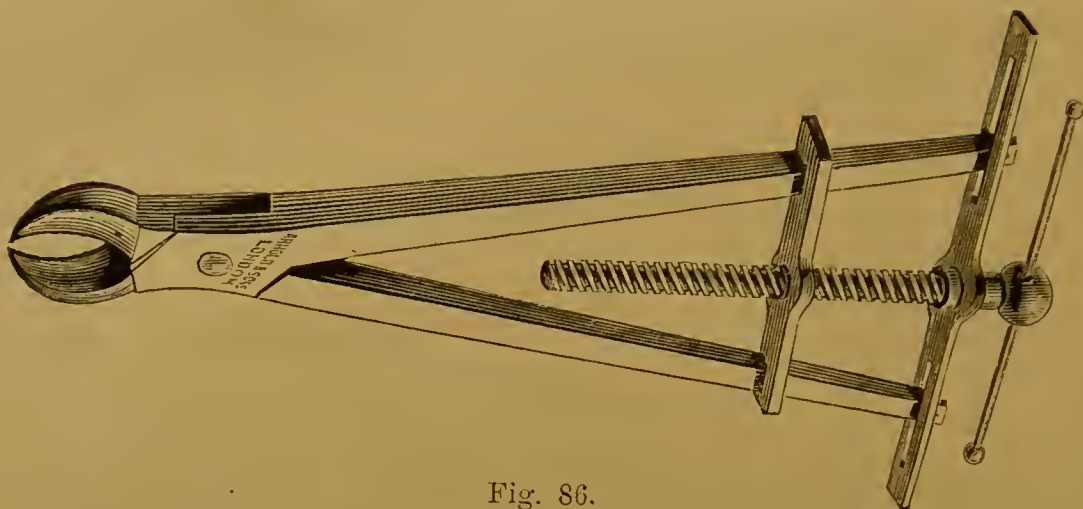


Fig. 86.

Tooth Shears, for cutting off extra growths, A. and Sons' improved, Fig. 86

| £ | s. | d. |
|---|----|----|
| 6 | 6 | 0 |



Fig. 87.

Tooth Forceps, improved, with lever, by Mr. Santy, Fig. 87 2 2 0

EXTRACT FROM "VETERINARY JOURNAL," SEPTEMBER, 1879.

"As many have told me they have not attempted to extract the molar teeth of the horse, especially those posteriorly situated, I had the pleasure of demonstrating the method and the instrument (a drawing of which I send; the instrument may now be had of Messrs. Arnold) before the members of the Norfolk and Eastern Counties Veterinary Medical Association at their last meeting.

"To demonstrate the way of performing certain operations is often difficult, but to describe it is, in my opinion, much more so; though in this case my task is comparatively an easy one, as the whole business is very simple. The animal being cast, I use Professor Varnell's balling iron to extend the jaws, and have an assistant to hold the tongue, while another, with a long smooth iron, pushes the check out of the way, and make quite sure that I get my forceps on the right tooth, and that only; when this is done I give a slight rotatory motion, then place my lever on the anterior tooth, immediately under the rivet of the forceps, and raise the tooth, which must come. When I know the tooth is loosened—which I can tell by a peculiar sucking noise—I take a fresh hold of it a little lower down, and incline it slightly to the inside, at the same time raising it—then out it comes without any injury to the jaw. In no case have I found injury at the time or afterwards to the anterior tooth from the pressure of the lever.

“I can extract the longest molars, and frequently the fifth one, without breaking a fang, and have seen Mr. Whitwell, my late partner, extract the sixth. I do nothing to the jaw subsequently, and merely order soft, nutritious food for the patient. I never saw anything but good results follow the operation. The instrument is an improvement on one invented by my predecessor, Mr. T. Wells, M.R.C.V.S., Norwich, and used by him successfully for a number of years.”

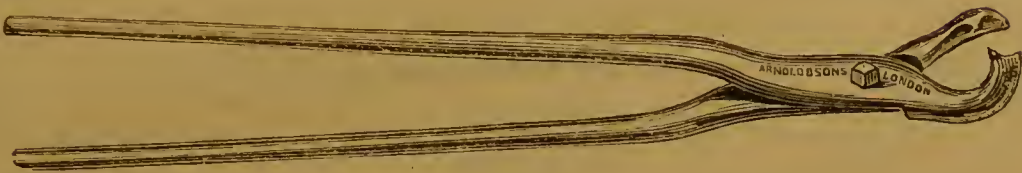


Fig. 88.

| | | | | |
|---|--|----|------|----|
| | | £ | s. | d. |
| Tooth Forceps, improved by Prof. Pritchard, Fig. 88 | | .. | 1 15 | 0 |

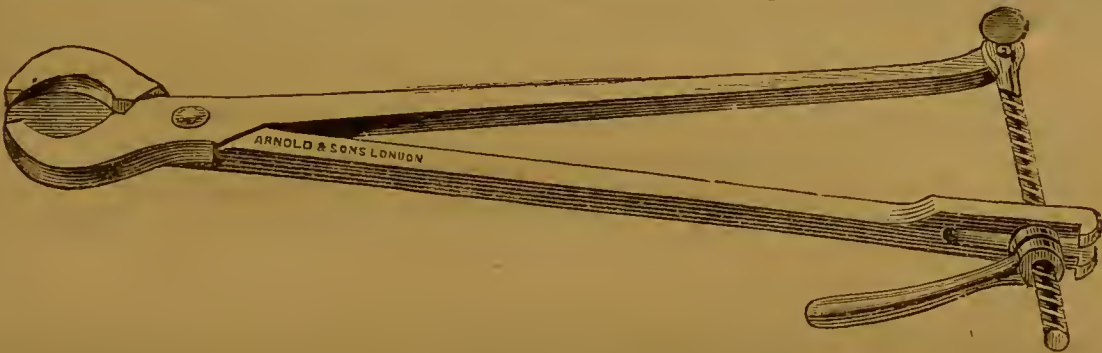


Fig. 89.

| | | | | | |
|--|-----------------------------|----|---|----|---|
| Tooth Shears, improved by Prof. Robertson, Fig. 89 | | .. | 6 | 0 | 0 |
| „ | „ Thompson's | .. | 3 | 10 | 0 |
| „ | Forceps, by Prof. Pritchard | .. | 0 | 10 | 6 |



Fig. 90.

| | | | | | | |
|------------------------|--|----|---------------------|---|----|---|
| Tooth Forceps, Fig. 90 | | .. | 10s., 12s. 6d., and | 0 | 15 | 0 |
| „ | „ for Dogs | .. | .. | 0 | 7 | 6 |
| „ | „ for extracting splinters, or portions of teeth, by Mr. Lewis | .. | .. | 0 | 12 | 6 |
| „ | Key for extracting the molars | .. | .. | 1 | 0 | 0 |
| „ | Saw, by Mr. Lewis | .. | .. | 1 | 0 | 0 |



Fig. 91.

| | | | | |
|--|--|---|---|---|
| Tooth Chisel, sliding, by Mr. Gowing, very superior, Fig. 91 | | 2 | 2 | 0 |
|--|--|---|---|---|



Fig. 92.

| | £ | s. | d. |
|---|---|----|----|
| Tooth Chisel Guide, for using with Mr. Gowing's sliding chisel, by Mr. Brown, Fig. 92 | 0 | 15 | 0 |

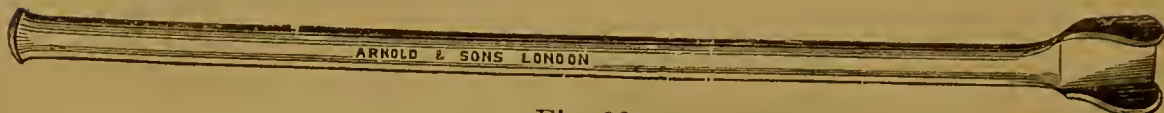


Fig. 93.

| | | | |
|--|---|----|---|
| Tooth Chisel, by Mr. Gowing, Fig. 93 | 0 | 17 | 6 |
|--|---|----|---|



Fig. 94.

| | | | |
|--|---|----|---|
| Tooth Rasp, with A. and Sons' improved guard to protect the gums, unscrews for portability, polished, Fig. 94 .. | 0 | 15 | 0 |
| „ „ with improved guard to protect the gums .. | 0 | 8 | 6 |
| „ „ plain, without guard | 0 | 6 | 0 |

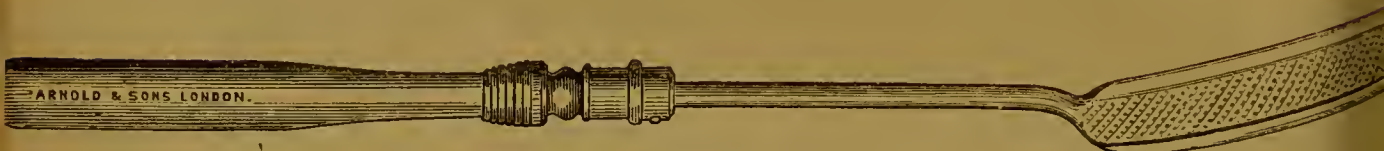


Fig. 95.

| | | | |
|--|---|---|---|
| Tooth Rasp, by Mr. Gowing, Fig. 95 | 1 | 1 | 0 |
| „ Rasps recut | 0 | 4 | 6 |



Fig. 96.

| | | | |
|--|---|---|---|
| Lateral Repeller, by Mr. Gowing, Fig. 96 | 1 | 1 | 0 |
|--|---|---|---|



Fig. 97.

| | | | |
|--|---|---|---|
| Repeller, by Mr. Gowing, Fig. 97 | 1 | 4 | 0 |
|--|---|---|---|

LANCETS, ETC.

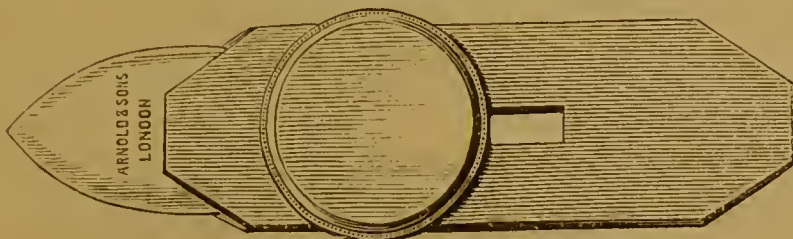


Fig. 98.

| | £ | s. | d. |
|--|---|----|----|
| Bleeding Lancet, with regulating slide, in brass handle, Fig. 98 | 0 | 3 | 6 |
| Lancet, in tortoiseshell handle, for Horse | 0 | 3 | 0 |
| " " Dog | 0 | 2 | 6 |
| " " Eye | 0 | 2 | 6 |
| " " Abscess | 0 | 3 | 0 |
| " Inoculating, by Prof. Simonds | 0 | 3 | 6 |
| Lampus Gum Lancet, in fixed handle | 0 | 3 | 6 |
| " " " in spring back handle, for pocket-case | 0 | 5 | 6 |
| Case, containing 3 lancets, bleeding, abscess, and eye .. | 0 | 10 | 0 |
| Lancet Case, leather, for 1 lancet | 0 | 0 | 8 |
| " " 2 lancets | 0 | 1 | 0 |
| " " 3 lancets | 0 | 1 | 0 |
| " " " card case, &c. | 0 | 1 | 6 |

FLEAMS, ETC.

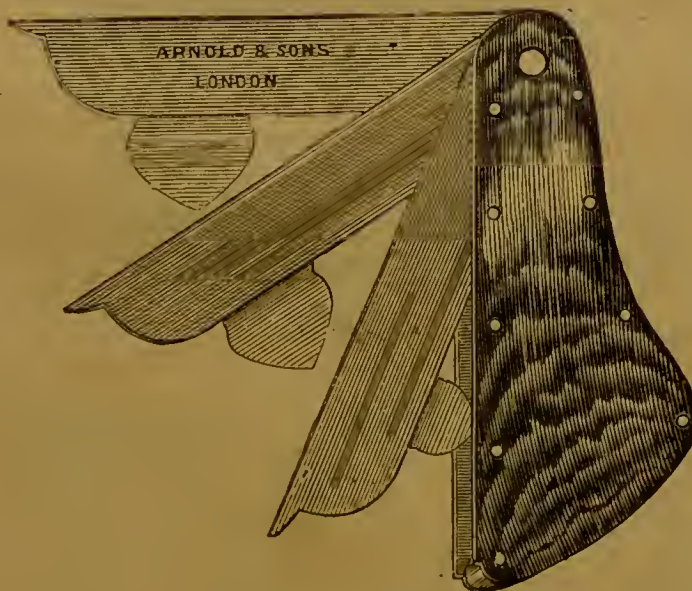


Fig. 99.

| | | | |
|---|---|---|---|
| Fleam, in horn handles, 3 blades, for horse or cattle, Fig. 99 | 0 | 9 | 6 |
| " " 2 " " " " " " | 0 | 7 | 6 |
| " " 1 " " " " " " | 0 | 5 | 6 |

| | £ | s. | d. |
|--|---|----|----|
| Fleam, in brass handles, 3 blades, for horse or cattle .. | 0 | 7 | 0 |
| „ „ 2 „ „ .. | 0 | 5 | 0 |
| „ „ 1 „ „ .. | 0 | 3 | 6 |
| „ with pin cutter at the end, extra | 0 | 1 | 6 |
| „ with A. and Sons' improved back, can be struck with the hand, dispensing with the bloodstick, in brass handles | 0 | 5 | 0 |
| „ „ in horn handles | 0 | 7 | 0 |
| „ Coronet, in brass handles | 0 | 3 | 6 |
| „ Spring, various patterns .. from 12s. to | 1 | 10 | 0 |
| Fleam and Lancet, in buckhorn | 0 | 5 | 0 |
| Bloodstick, loaded with lead, and opening at top for pins .. | 0 | 1 | 6 |

NERVING INSTRUMENTS, ETC.



Fig. 100.

| | | | |
|---|---|----|---|
| Nervng Instruments, by Mr. Gowing, in case, complete, Fig. 100 | 1 | 0 | 0 |
| „ „ in case, containing knife, bistoury, and needles | 0 | 10 | 6 |
| Nervng Bistoury | 0 | 4 | 6 |
| „ „ in fixed handle | 0 | 3 | 6 |
| „ „ with spring back and French catch .. | 0 | 5 | 6 |
| „ „ by Prof. Pritchard | 0 | 5 | 6 |

| | £ | s. | d. |
|--|---|----|----|
| Nerving Knife, by Mr. Ernes | 0 | 5 | 6 |
| " " in fixed ivory handle .. . | 0 | 3 | 6 |
| " " improved by Mr. Woodger .. | 0 | 4 | 0 |
| " " in horn, spring handle, for pocket-case .. | 0 | 4 | 0 |
| " " improved by Mr. Gowing .. . | 0 | 5 | 0 |
| " " by Prof. Dick | 0 | 5 | 6 |
| " Scissors, by Mr. Gowing | 0 | 15 | 0 |

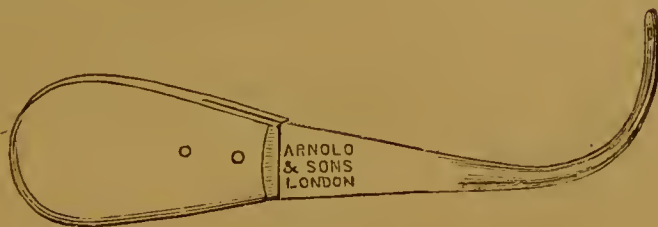


Fig. 101.

| | | | |
|---|---|---|---|
| Nerving Needle, improved, by Mr. Metherell, Fig. 101 .. | 0 | 3 | 6 |
| " " " by Prof. Robertson | 0 | 3 | 6 |

SUTURE NEEDLES, WIRE, SILK, ETC.

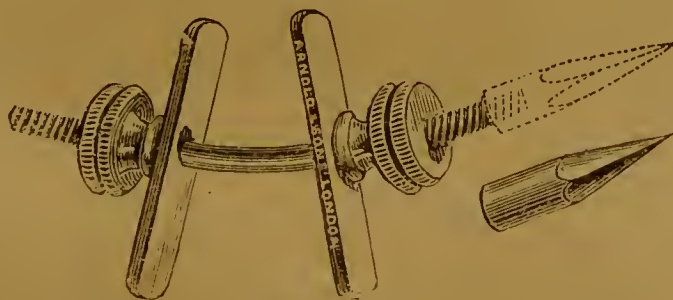


Fig. 102.

| | | | |
|---|---|----|---|
| Suture Instrument, by Capt. Russell, Fig. 102 | 1 | 15 | 0 |
|---|---|----|---|

EXTRACT FROM "VETERINARY JOURNAL," JANUARY, 1881.

"The accompanying suture can be advantageously used in the place of wire, skewers, or string, in all deep-seated wounds where a deep suture is required to keep parts in apposition, and to prevent superficial sutures from being torn out; also to prevent protrusion or prolapsus of the vagina or uterus in hernie of various kinds, &c. Some of the advantages of this suture are that it does not tear out; if parts swell it can be loosened, and when the swelling abates it can be tightened up again. It is easily and readily adjusted. It remains nicely as placed, looks what it is, and gives general satisfaction. When required for use, all that it is necessary to do, is to

put one of the 'plates,' with the bevelled edge inwards, over one end, and behind that a thumb-screw, and on the other end screw on the trocar point. Then push it through the parts, remove the point, and add a plate and thumb-screw as on the other end; then screw up the thumb-screw as tight as necessary. I have had them made up in four pairs, measuring $3\frac{1}{2}$, 5, $6\frac{1}{2}$, and 8 inches long respectively. They are made of steel wire, about $\frac{3}{16}$ inch in thickness, slightly curved. At each end of the wire a deep thread is cut, upon which fit a trocar point on one end and a plate and thumb-screw on the other. For the requirements of the various sutures, plates of metal of different lengths are provided, viz., four plates with one hole in the centre of each, and two plates with two holes for a double suture; the former are about 2 inches long, the latter $3\frac{3}{4}$ inches, the holes being from an inch to an inch-and-a-half apart in the latter. The inside edges of all these plates are bevelled off to prevent undue pressure or cutting. There are two trocar points with each set of sutures, which screw on either end of the wires, and four thumb-screws, also interchangeable. The plates are made of steel, the nuts of brass, but all the parts are nickel-plated to prevent rust or corrosion. The sets are neatly mounted in a case, namely:—four pairs of sutures of different lengths, two trocar points, six plates, and four screw-nuts."



Fig. 103.

| | | £ | s. | d. |
|--|----|---|----|----|
| Suture Needle, tubular, by Mr. Field, Fig. 103 | .. | 0 | 12 | 6 |
| " " with eye at point, in ebony handle.. | .. | 0 | 3 | 6 |
| " " folding, in tortoiseshell, by Mr. Lowe | .. | 0 | 10 | 6 |



Fig. 104.

| | | | | |
|---------------------------------|----|---|----|---|
| Suture Needle Forceps, Fig. 104 | .. | 0 | 7 | 6 |
| " " " with cutting nippers | .. | 0 | 7 | 6 |
| " " " improved | .. | 0 | 15 | 0 |

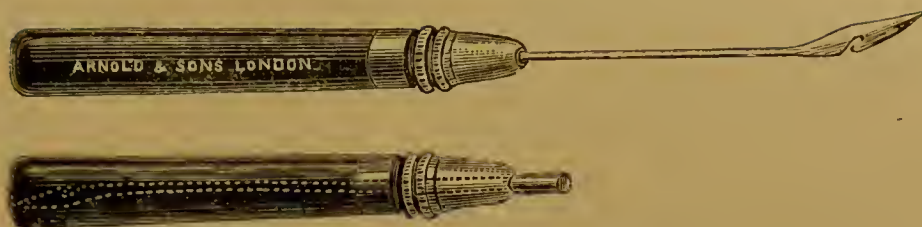


Fig. 105.

Suture Needle and Holder, by Mr. Fleming, made in
3 sizes, Fig. 105 each

£ s. d.

0 3 6

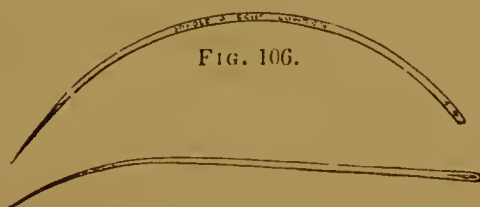


FIG. 106.



Fig. 107.

| | | | | | |
|---|---------|----------|---|---|---|
| Suture Needles, full curved, Fig. 106 | .. | per doz. | 0 | 3 | 0 |
| „ „ half curved, Fig. 107 | .. | „ | 0 | 3 | 0 |
| „ „ straight | .. .. . | „ | 0 | 3 | 0 |
| „ „ plated to prevent rusting | .. .. . | „ | 0 | 5 | 0 |
| „ „ by Prof. Pritchard | .. | „ | 0 | 4 | 0 |
| „ „ with plain eye for fine metallic wire, each | .. | „ | 0 | 1 | 0 |
| „ „ with screw eye for stout | „ „ | „ | 0 | 1 | 6 |
| „ Wire, silver, various sizes | .. .. . | per reel | 0 | 5 | 0 |
| „ „ „ „ | .. .. . | per hank | 0 | 2 | 0 |
| „ „ silver-plated | .. .. . | „ | 0 | 1 | 0 |
| „ „ metallic, for plain-eyed needles, fine | .. .. . | „ | 0 | 0 | 9 |
| „ „ for screw | „ stout | „ | 0 | 0 | 6 |
| Spaying Needles | .. .. . | per doz. | 0 | 1 | 0 |
| Eye | „ .. . | „ | 0 | 5 | 0 |



Fig. 108.

| | | | | |
|---|------------------|---|---|---|
| Ligature Silk, 4 different sizes, on tablet, Fig. 108 | .. | 0 | 1 | 6 |
| „ „ various sizes.. | per hank | 0 | 1 | 0 |

ARNOLD AND SONS' IMPROVED SILK possesses the following advantages:—Pure silk, free from all dressing or colouring matter, and will not kink or curl under any circumstances; immense strength; being plaited will tie securely without untwisting.

EXTRACT FROM THE "LANCET," OCTOBER 15TH, 1870, PAGE 556.

"We have been supplied with a specimen of this cord, which appears to us to be very good."

"BRITISH MEDICAL JOURNAL," OCTOBER 8TH, 1870, PAGE 393.

"Its recommendations are, that it does not twist or eurl when used, like ordinary silk."

"MEDICAL TIMES AND GAZETTE," OCTOBER 15TH, 1870, PAGE 465.

"It is of a plaited texture, very strong, and is free from all dressing or colouring matter."

"MEDICAL PRESS AND CIRCULAR," OCTOBER 12TH, 1870, PAGE 300.

"We have seen a sample of this substance, made by Messrs. Arnold and Sons, and can strongly recommend it. We hope some of it may be sent out to the French at the seat of war."

| | £ | s. | d. |
|---|---|----|----|
| Suture Thread or Twine per hank | 0 | 0 | 3 |
| „ Wire Forceps, for twisting wire, by Mr. Field . . | 0 | 5 | 0 |
| „ „ „ by Mr. Gowing . . | 0 | 7 | 6 |
| Leather Case, containing 2 screw and 2 plain-eyed suture needles, 6 assorted needles, 2 hanks each stout and fine metallic wire, 1 hank silver-plated wire, silk and thread, complete | 0 | 15 | 0 |
| Leather Needle Case | 0 | 2 | 0 |

TROCARS, EXPLORING NEEDLES, ETC.



Fig. 109.

Trocar, for hoven cattle, with German silver canula, Fig. 109 0 7 0



Fig. 110.

Trocar, Hydrothorax, with German silver canula, Fig. 110 0 7 0
 „ „ with silver canula, in ebony case,
 for the pocket 7s. 6d., 8s. 6d., and 0 9 6
 „ Capillary Drainage, per set, in case complete . . 2 0 0



Fig. 111.

| | £ | s. | d. |
|--|---|----|----|
| Trocar, with silver canula, for puncturing the intestines in flatulent colic, by Mr. Alex. Gunn, in leather case, complete, Fig. 111 | 0 | 10 | 6 |

EXTRACT FROM "VETERINARY JOURNAL," APRIL, 1878.

"Both these distressing cases did well, and I can confidently say that they were perfectly cured by the operation of puncture. The trocar and canula I used in the last case were specially made by Messrs. Arnold and Sons."

| | | | |
|--|---|----|---|
| Trocar and Canula, by Prof. Williams | 0 | 15 | 0 |
| Trocars, Syphon, for tapping chest of horses | 3 | 3 | 0 |



Fig. 112.

| | | | |
|--|---|---|---|
| Exploring Needle, or pin director, in ivory turn-back case, Fig. 112 | 0 | 3 | 6 |
|--|---|---|---|



Fig. 113.

| | | | |
|--|---|---|---|
| Exploring Needle, improved by Mr. Sheather, in ebony case, Fig. 113. | 0 | 3 | 6 |
|--|---|---|---|

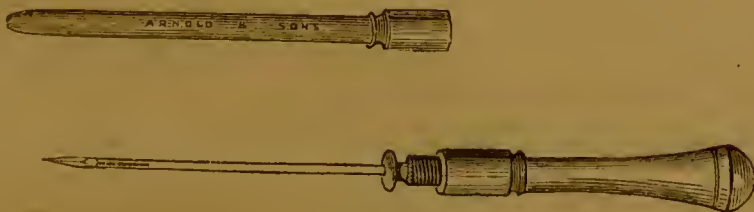


Fig. 114.

| | | | |
|---|---|---|---|
| Exploring Trocar, with silver canula, in ivory turn-back case, 4 sizes, Fig. 114 each | 0 | 7 | 6 |
|---|---|---|---|

MILKING SYPHONS, TUBES, ETC.



Fig. 115.

| | £ | s. | d. |
|--|---|----|----|
| Milking Syphon, A. and Sons' improved, Fig. 115 .. | 0 | 2 | 6 |

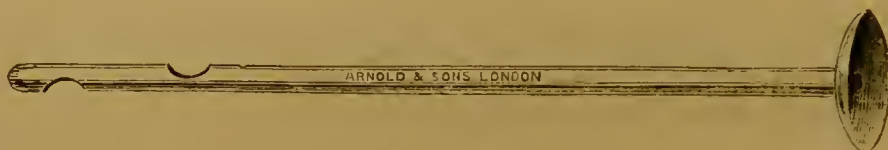


Fig. 116.

| | | | |
|---------------------------|---|---|---|
| Milking Tube, Fig. 116 .. | 0 | 1 | 6 |
|---------------------------|---|---|---|

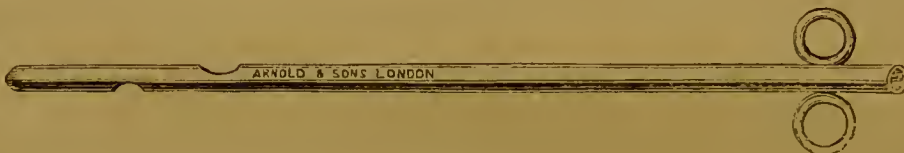


Fig. 117.

| | | | |
|---|-------------|---|-----|
| Milking Tube, with rings, Fig. 117 .. | 0 | 1 | 0 |
| Self-acting Cow Milker, per set of 4 .. | 0 | 6 | 6 |
| Lactometers for testing milk .. | 1s. 6d. and | 0 | 2 6 |

OBSTETRIC INSTRUMENTS.

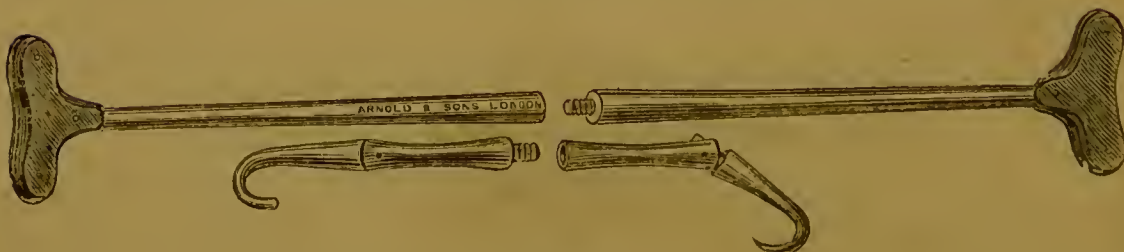


Fig. 118.

| | | | |
|--|---|----|---|
| Fœtal Adjuster, improved by Mr. Gowing, with sharp and blunt-pointed foal hooks, complete, Fig. 118 .. | 1 | 10 | 0 |
|--|---|----|---|

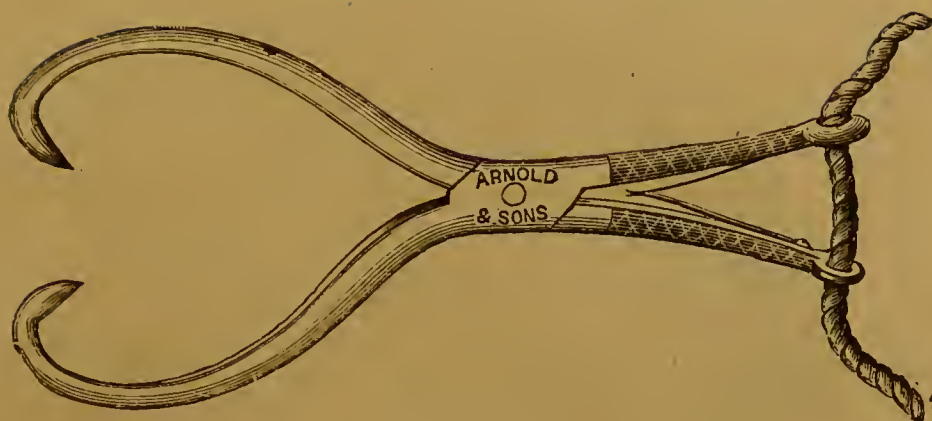


Fig. 119.

| | £ | s. | d. |
|--|---|----|----|
| Foal Forceps, by Mr. Roberts, Fig. 119 | 0 | 12 | 6 |
| „ Hooks, for live or dead, with ropes each | 0 | 3 | 6 |
| „ „ for extracting dead foal (folding) | 0 | 12 | 6 |
| „ „ „ live „ „ | 1 | 1 | 0 |
| „ Hook, with whalebone staff, improved by Mr. Lewis | | | |
| Uterus Instruments, triangular ring, with hole for cord, | | | |
| roughed inside, sharp hook, blunt hook roughed inside, | | | |
| oval ring, hook with single and double spears to adjust | | | |
| with screws, curved knife, and small and large beech | | | |
| pessaries, &c., by Mr. Cooper | | | |
| Embryotomy Knives, Hook, and Turnscrew, by Mr. Fisher, | | | |
| complete set, in leather case | 1 | 7 | 6 |



Fig. 120.

| | | | |
|--|---|---|---|
| Embryotomy Knife, Arnold and Sons' improved, in horn | | | |
| handle, with spring secret blade, Fig. 120 | 0 | 8 | 6 |

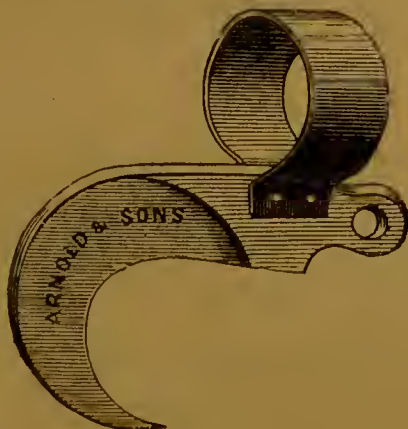


Fig. 121.

| | | | |
|---|---|---|---|
| Embryotomy Knife, with ring, Fig. 121 | 0 | 4 | 0 |
| „ „ improved by Mr. Cox | 0 | 4 | 0 |

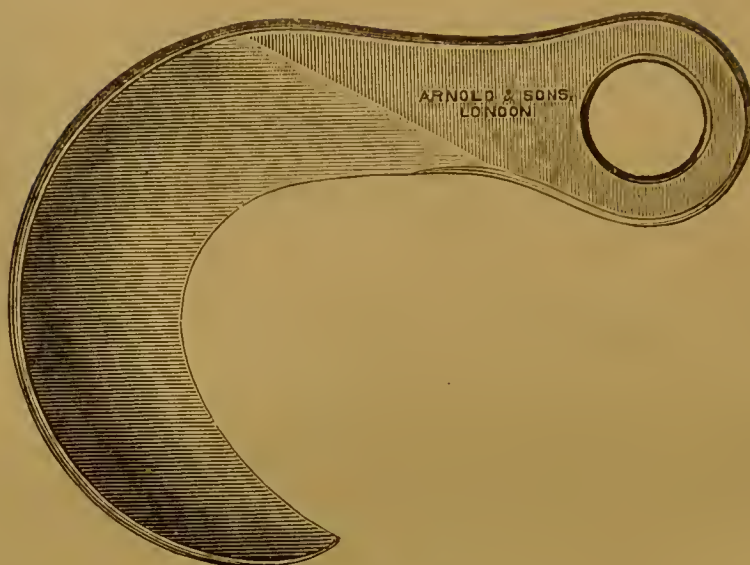


Fig. 122.

| | | | |
|--|---|----|----|
| | £ | s. | d. |
| Embryotomy Knife, improved by Mr. Cowen, Fig. 122 .. | 0 | 4 | 0 |

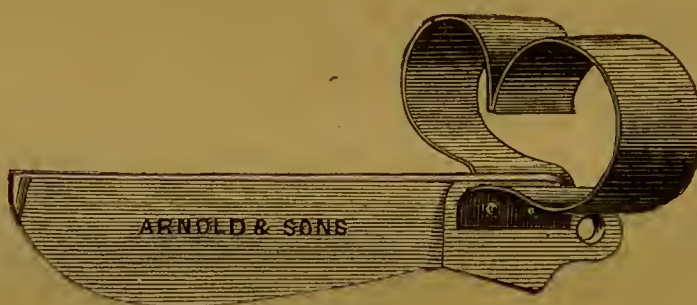


Fig. 123.

| | | | |
|---|---|---|---|
| Embryotomy Knife, improved by Mr. McGavin, Fig. 123 | 0 | 5 | 0 |
| „ Hook, with ring, by Mr. Fisher | 0 | 4 | 0 |

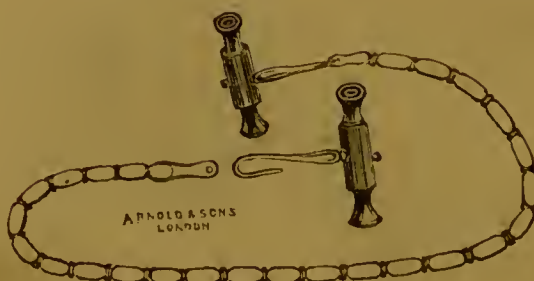


Fig. 124.

| | | | |
|---|---|----|---|
| Embryotomy Chain Sector, by Mr. J. Hoole, Fig. 124 .. | 1 | 15 | 0 |
|---|---|----|---|

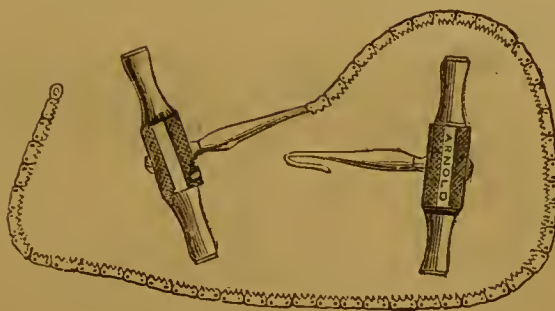


Fig. 125.

| | £ | s. | d. |
|--|---|----|----|
| Embryotomy Chain Saw, by Mr. J. Hoole, Fig. 125 .. | 1 | 15 | 0 |
| " " " " and Sector, both fitting same | | | |
| handle, by Mr. J. Hoole, complete, Figs. 124 and 125.. | 3 | 3 | 0 |

Vide "VETERINARIAN" AND "VETERINARY JOURNAL,"
MARCH, 1879.

"SIR,—Since my communication advocating the use of the chain saw and chain sector in the operation of embryotomy, Messrs. Arnold and Sons have kindly made for me the above instruments. I have been waiting for an opportunity to give them a practical trial, but a case requiring their use not having occurred, I have tried them on foetal calves, *ex utero*, and am fully convinced, from the ease and rapidity with which the neck was cut through, and the fore and hind limbs detached, that some of the greatest difficulties met with in obstetric practice will now be easily overcome.

"I remain, yours respectfully,

"Sleaford, February, 1879.

"J. HOOLE."

| | | | |
|--|---|----|---|
| Parturition Forceps, by Mr. Fisher | 0 | 12 | 6 |
| " " by Mr. Nelson | 1 | 1 | 0 |

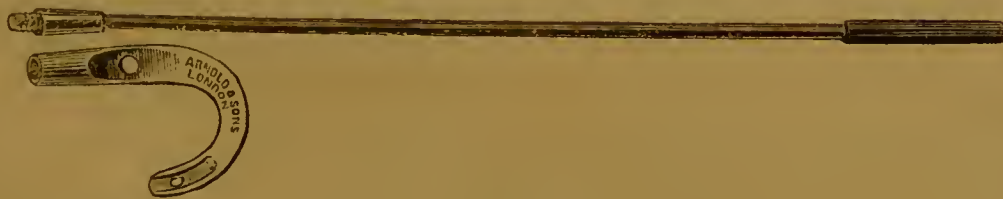


Fig. 126.

| | | | |
|--|---|----|---|
| Parturition Instrument, with hook and whalebone staff, by Prof. Simonds, Fig. 126 | 0 | 15 | 0 |
| Os Uteri Dilators, by Mr. West, complete in case .. | 2 | 2 | 0 |

The set consists of three sizes of dilating bags, made of india-rubber, to which is attached a syringe for inflation. The bags can be inflated with air or water as required. This apparatus is most valuable, as it enables dilatation of the os uteri when all other means have failed.

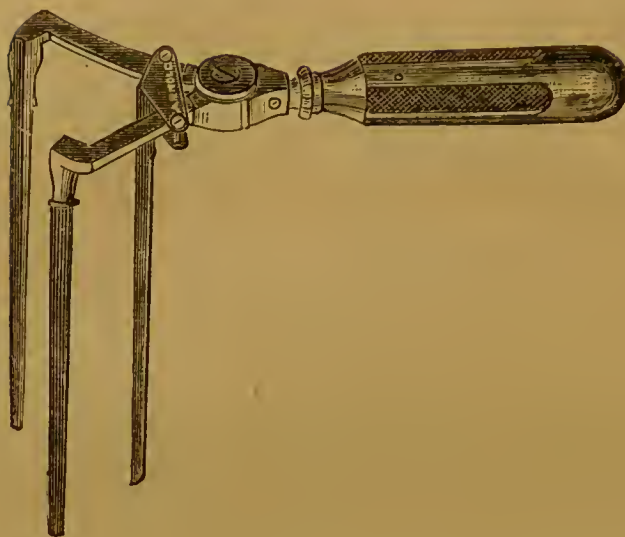


Fig. 127.

| | | | £ | s. | d. |
|-------------------------------------|----|----|---|----|----|
| Vaginal Dilating Speculum, Fig. 127 | .. | .. | 3 | 0 | 0 |

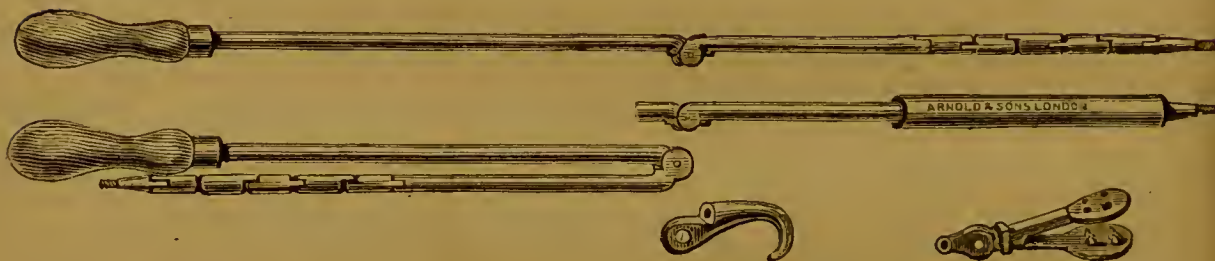


Fig. 128.

| | | | | | |
|--|----|----|---|---|---|
| New Parturition Instrument, with ear clamp, hook, and handle, complete, by Mr. S. Beeson, Fig. 128 | .. | .. | 3 | 3 | 0 |
|--|----|----|---|---|---|

COPY OF LETTER IN "VETERINARIAN," NOVEMBER, 1881.

"Will you allow me to inform the various correspondents who write me, that Messrs. Arnold and Sons have undertaken to manufacture the 'Ear Clamp and Parturition Hook and Handle,' as shown by me to the Yorkshire Veterinary Medical Association at their Leeds meeting? I may add that I have made some improvements in the instruments, and believe they will give satisfaction."

| | | | | | |
|--------------------------------------|----|----|---|----|---|
| Bitch Obstetric Forceps, by Mr. Rowe | .. | .. | 0 | 15 | 0 |
| " " improved by Mr. Hill | .. | .. | 1 | 1 | 0 |

DRENCHING HORNS, BITS, ETC.

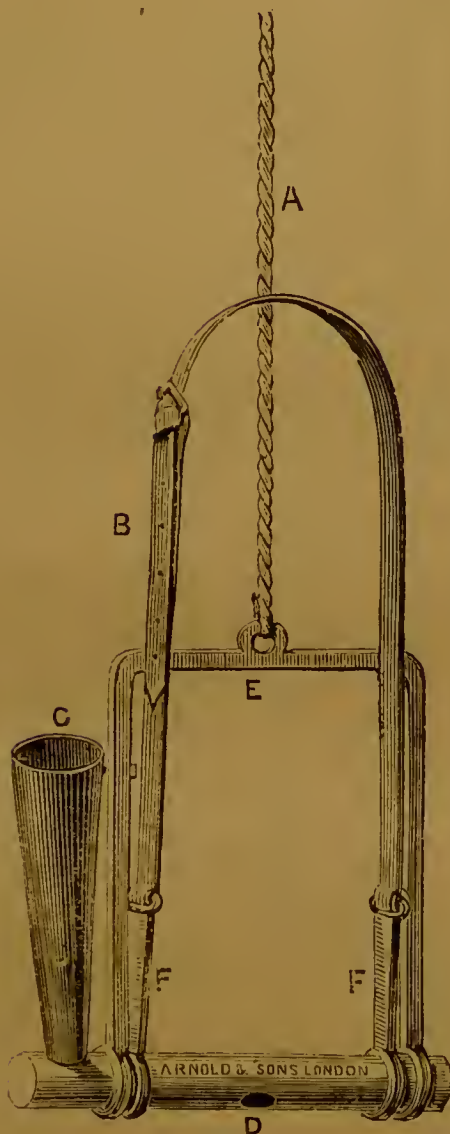


Fig. 129.

| | |
|---|--------|
| | £ s. d |
| Drenching Frame, steel, A. and Sons' improved, for giving horses or cattle draughts, Fig. 129 | 1 10 0 |

A—rope. B—leather strap. C—funnel. D—outlet. E—bit frame.
F—revolving attachments.



Fig. 130.



Fig. 131.

| | £ | s. | d. |
|---|---|----|----|
| Drenching Apparatus, Parker's, Figs. 130 and 131 .. | 0 | 7 | 6 |
| „ Bottle, Tin | 0 | 2 | 6 |
| „ „ superior japanned | 0 | 5 | 0 |
| „ „ as made for the Army | 0 | 2 | 6 |
| Drenching Horns 1s., 1s. 3d., and | 0 | 1 | 6 |
| „ „ for dogs | 0 | 1 | 0 |



Fig. 132.

| | | | |
|--|---|---|---|
| Drenching Horn, A. and Sons' improved, to carry medicine, Fig. 132 | 0 | 2 | 6 |
| Cow Horn Knobs, brass each | 0 | 0 | 8 |
| Wrench in wooden handle, for ditto | 0 | 2 | 0 |

BANDAGES.

| | | | £ | s. | d. |
|--|--------------|--|---|----|----|
| Flannel Bandages, with tapes, &c. | per set of 4 | | 0 | 6 | 0 |
| Linen " " " | " | | 0 | 6 | 0 |
| Hemp " " " | " | | 0 | 4 | 0 |
| Leveslay's Newmarket Bandages, white | " | | 0 | 6 | 0 |
| " " " grey or fawn-coloured, | " | | 0 | 6 | 0 |
| Woollen Bandages, 4 in., 5 in., 6 in. | per yard | | | | |

DRAWING KNIVES, SEARCHERS, AND
SHOEING INSTRUMENTS.

Fig. 133.

Drawing Knives (Long's, late 217, High Holborn), Fig. 133

| | | | | | | | | | |
|-----------|----|----|----|----|-----------------------|---|----|----|---|
| | | | | | single edge, per doz. | 0 | 18 | 0 | |
| Searchers | ” | .. | .. | .. | double edge | ” | 1 | 4 | 0 |
| | .. | .. | .. | .. | single edge | ” | 0 | 18 | 0 |
| | ” | .. | .. | .. | double | ” | 1 | 4 | 0 |

Messrs. Arnold and Sons having purchased the exclusive right to manufacture Long's drawing knives, beg to caution the profession against imitations.

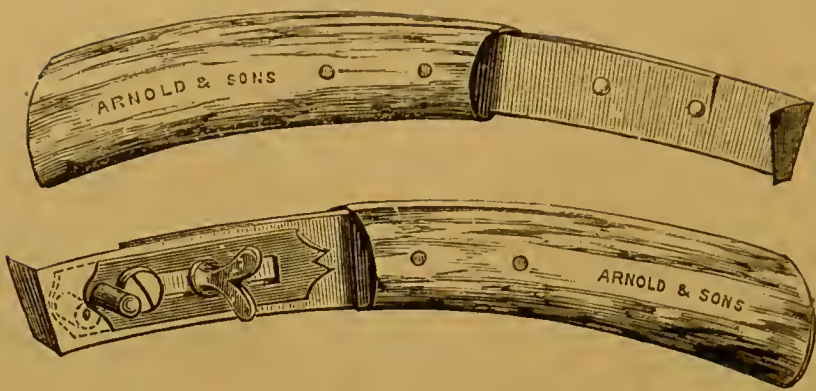


Fig. 134.

| | £ | s. | d. |
|--|---|----|----|
| Graduated Drawing Knife, with regulating slide, by Mr. Fleming, as devised for preparing the foot for the Charlier, Periplanter, or other kinds of shoes, Fig. 134 | 0 | 7 | 6 |
| Shoeing Knife, Charlier's | 0 | 5 | 6 |
| Drawing „ by Mr. Westley Richards | 0 | 5 | 6 |
| Spare blade for ditto | 0 | 2 | 0 |
| Drawing Knife, portable, with spring, horn handle, and 6 blades, in leather case | 1 | 1 | 0 |
| „ „ in buckhorn handle, by Mr. Gowing | 0 | 5 | 0 |
| „ „ in horn for pocket-case | 0 | 2 | 6 |
| „ „ with spring back for the pocket, 1 blade.. | 0 | 5 | 0 |
| „ „ ditto ditto 2 blades | 0 | 7 | 6 |
| „ „ and sheep foot knife, in spring back, horn handle | 0 | 7 | 6 |
| „ „ for bleeding in foot | 0 | 2 | 0 |
| „ „ Stones | 0 | 1 | 0 |
| Sheep Foot Knife, in spring back, horn handle | 0 | 5 | 0 |

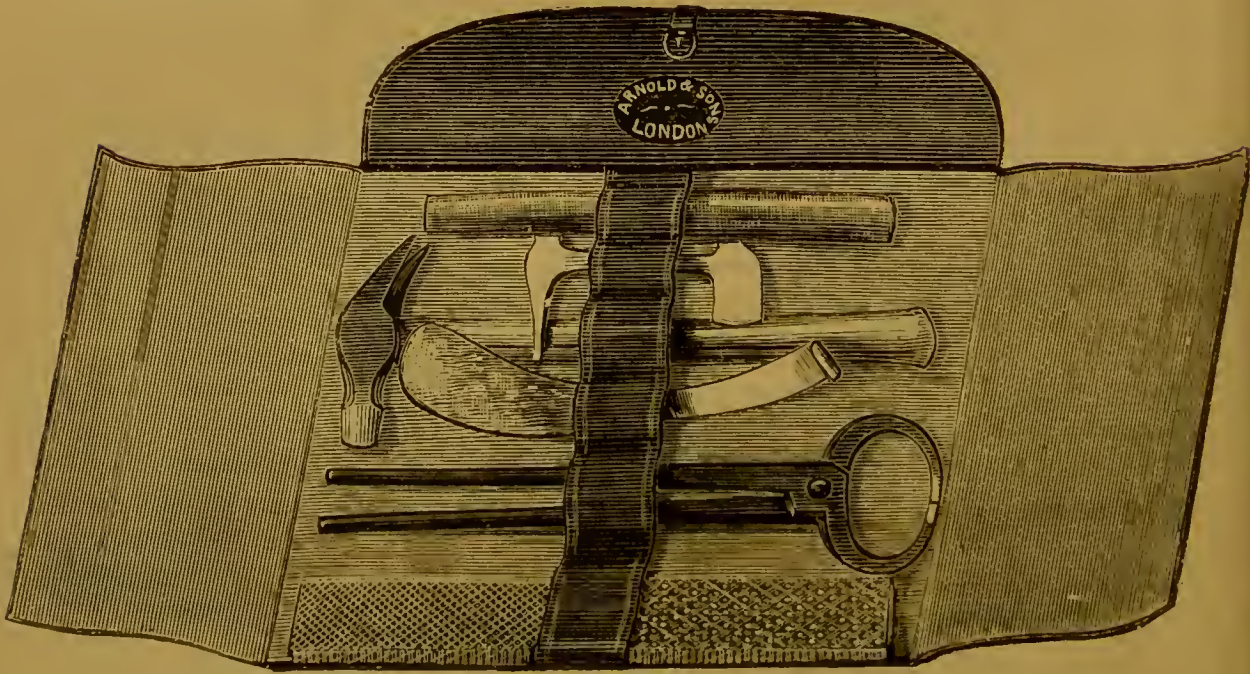


Fig. 135.

| | £ | s. | d. |
|--|---|----|----|
| Farrier's Case, containing pincers, hammer, buffer, rasp, drawing knife, and setting stone, complete, Fig. 135 .. | 1 | 5 | 0 |

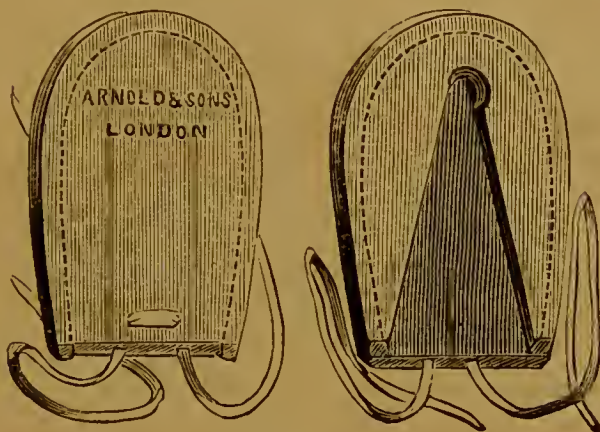


Fig. 136.

| | | | |
|--|---|---|---|
| Shoeing Pads for stopping horses' feet (Cherry's patent) Fig. 136 per pair | 0 | 2 | 6 |
| <i>Arnold and Sons have purchased Cherry's Machinery for making these Patent Pads.</i> | | | |

Shoeing Pads, india-rubber (Downie and Harris's patent).

Prices, per set of four Pads:—

No. 0, 6s., No. 1, 7s., No. 2, 7s. 6d., No. 3, 8s. 6d., No. 4, 9s.,
No. 5, 10s., No. 6, 11s., No. 7, 12s.

Frog Pad or Sole, price per pair:—

No. 1, 3s., No. 2, 3s. 6d., No. 3, 3s. 9d., No. 4, 4s., No. 5, 4s. 3d.,
No. 6, 4s. 6d., No. 7, 4s. 9d.

These are generally used for fore-feet only.

These pads (or cushions) are moulded in *soft rubber* to fit into the *frog* of the *horse's foot*, and *under the iron shoe*. They prevent lameness in *horses* by affording an elastic support and protection to the frog and foot, diminishing concussion, and thereby assisting those parts to perform more freely their natural functions.

| | | | |
|---|---|----|---|
| Shoeing Pads (McKenny's) per pair | 0 | 5 | 0 |
| Cresses for making Mr. Fleming's new form of shoes, per set of 3 | 2 | 10 | 0 |
| Felt for Shoeing | | | |
| Stable Shoes, india-rubber per pair | 0 | 3 | 6 |
| Swabs for horses' feet | 0 | 7 | 6 |
| „ Felt A. and Sons' improved | 0 | 10 | 6 |
| Shoeing Rasp 14 in. 2s., 16 in. | 0 | 2 | 6 |



Fig. 137.

| | | | |
|---|---|---|---|
| Shoeing Rasp, by Charlier, Fig. 137 | 0 | 4 | 0 |
|---|---|---|---|

| | £ | s. | d. |
|---|---|----|----|
| Charlier's Shoes, various sizes per set | 0 | 5 | 6 |
| Jointed Shoe, black | 0 | 7 | 6 |
| „ „ bright | 0 | 10 | 6 |
| Hunting Shoe, A. and Sons' improved jointed, to be temporarily applied in case of losing a shoe, will fit any size foot, with leather and straps, complete each | 0 | 18 | 0 |
| Shoeing Pincers, very strong 5s. and | 0 | 6 | 0 |
| „ Buffers | 0 | 2 | 6 |
| „ Hammer, buffer and pincers united (Evans') .. | 1 | 1 | 0 |
| „ Hammers, steel 3s. 6d. and | 0 | 5 | 0 |
| Shoe Pointing Hammers | 0 | 8 | 6 |
| „ Turning „ various | 0 | 8 | 6 |
| Shoeing Hammers, with claw | 0 | 3 | 6 |
| Hunting Hammer, with chopper, fixed handle | 0 | 12 | 6 |
| Horse-shoe Picks 1s. 6d. and | 0 | 2 | 6 |
| Horse Pick and Hammer, to fold | 0 | 3 | 6 |
| Farriers' Punches | 0 | 1 | 6 |
| Horse-shoe Stamps 3s. 6d. to | 0 | 7 | 6 |
| Posting Shoes, india-rubber.. .. . | 0 | 10 | 0 |

THERMOMETERS, BAROMETERS, ETC.

Arnold and Sons have succeeded in producing Clinical Thermometers with sensitive bulbs, thereby effecting a great saving of time in registering temperature.

N.B.—Arnold and Sons guarantee the accuracy of every thermometer, which is tested with an apparatus invented by them, and verified at Kew.

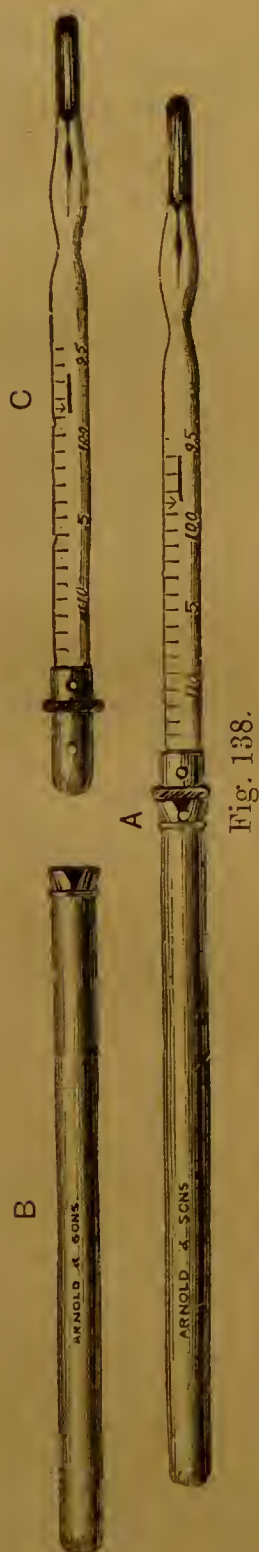
£ s. d.

| | | | |
|--|--|--|--|
| Arnold and Sons' Patent Pocket Clinical | | | |
| Thermometer, with bayonet joint, as | | | |
| suggested by Prof. Brown, with Cen- | | | |
| tigrade and Fahrenheit scales, in ster- | | | |
| ling silver case, Fig. 138 | | | |
| Ditto ditto in German silver | | | |
| case | | | |
| Ditto ditto in sterling silver | | | |
| case, with Fahrenheit scale .. No. 1 | | | |
| Ditto ditto in German silver | | | |
| case ditto ditto .. No. 2 | | | |
| Ditto ditto in aluminium case | | | |
| No. 3 | | | |
| Ditto ditto with magnified | | | |
| index, in sterling silver case | | | |
| Ditto ditto in German silver | | | |
| case | | | |
| Ditto ditto with indestructible | | | |
| index, in sterling silver case | | | |
| Ditto ditto in German silver | | | |
| case | | | |
| Ditto ditto with magnified and | | | |
| indestructible index combined, in ster- | | | |
| ling silver case | | | |
| Ditto ditto in German silver | | | |
| case | | | |
| Thermometers, with Kew certificate, 2s. extra. | | | |

All thermometers in silver or German silver cases have the coloured scale, which renders the reading more intelligible, and likewise the constriction, to prevent the possibility of the index descending into the bulb.

The woodcut A shows the thermometer with case attached; C, the instrument without the case; and B, the thermometer when closed.

New Thermometers can be fitted to
the old cases of Nos. 1 and 2 for .. 0 7 6



EXTRACT FROM "VETERINARIAN."—"No one now hesitates to admit the value of the thermometer as an aid to diagnosis, but it is almost too much to expect that every veterinary surgeon shall carry with him on all occasions an instrument a foot in length. Even the more modern thermometers, of six or seven inches' length, are not convenient for any pocket, although it was an achievement to reduce the length of the instrument one half.

"Messrs. Arnold, instrument makers, of West Smithfield, have carried out my idea in a perfectly satisfactory manner, and by the very simple arrangement which is shown in the woodcut the three-inch thermometer is converted at will into an instrument six inches in length, which is perfectly effective for all our patients, and at the same time, when closed, is less cumbersome than a common pencil case, and may be carried in the waistcoat pocket.

"It may be fairly claimed for the instrument that it has the merit of perfect simplicity, and, after a reasonable trial, I can assert that it is efficient in practice."

Extract from *Lancet* (Second Notice), December 19th, 1874.—"Of all the pocket companions now essential to the practitioner, none is more indispensable than a good thermometer. It is a gratifying circumstance to find instrument makers taking pains to make the instrument more useful by making it more reliable and more easy of use. The Messrs. Arnold and Sons have attempted to make the scale more legible by colouring it red and indelibly, and the attempt has been successful. The instruments have also been carefully tested as to accuracy."

Extract from *Medical Times and Gazette* (Second Notice), Feb. 27th, 1875.—"One of the latest and best forms of this useful instrument has been forwarded to us by Messrs. Arnold and Sons, of 35 and 36, West Smithfield. It is of a very useful size for the waistcoat pocket. The marking of the glass is *clear* and *indelible*."

Extract from *British Medical Journal* (Second Notice), May 15th, 1874.—"Messrs. Arnold and Sons have improved their clinical thermometers. The scale is indelible; the one we have examined is *very accurate*, and they are all carefully adjusted; it is an extremely neat and useful form of instrument."

Extract from *Lancet*, May 10th, 1873.—"It will at once be seen that by a very simple arrangement a thermometer of $3\frac{1}{2}$ in. long can instantly be increased to one of 7 in. in length, and at the same time when closed can be carried in the waistcoat pocket, and is less cumbersome than a common pencil-case."

Extract from *British Medical Journal*, June 7th, 1873.—"This is certainly a most ingenious instrument, and one of the best hitherto brought out. It is very simple and portable, and mechanical means are taken which very much reduce its chances of being broken."

Extract from *Medical Times and Gazette*, May 24th, 1873.—"To the end of the thermometer is secured part of the case, which mount is so formed that the instrument is not liable to slip through the fingers and thereby get broken, which is so frequently the case with those in present use."

Extract from *Medical Record*, June 25th, 1873.—"The great desideratum of furnishing a really pocket clinical thermometer (many of those so styled are only so in name) has been secured by a very ingenious device patented by Messrs. Arnold and Sons. We have used it, and can recommend it as trustworthy, portable, and very convenient."

Extract from *Students' Journal*, April 24th, 1875.—"The colouring has the merit of being indelible. Those who use these thermometers may rely on their accuracy, a point of no little consequence, as they are all tested by a new standard thermometer, and those that vary from the standard in the slightest degree are destroyed."

Extract from the *Medical Press and Circular*, June 4th, 1873.—“In the ordinary thermometer cases the instruments are constantly being broken, whereas in the patent thermometer referred to this is almost a matter of impossibility.”

Extract from *Students' Journal*, June 7th, 1873.—“The new pocket clinical thermometer, invented and manufactured by Messrs. Arnold and Sons, is the most portable one ever introduced to the notice of the medical profession; whilst in other good qualities it is fully equal to any of those previously brought forward.”

Extract from *Medical Record*, March 17th, 1875.—“This little pocket clinical thermometer has many advantages. It is portable, firmly mounted with a well-devised bayonet catch and graduated very legible and indelible reading scale. They are well tested, accurate instruments, and combine all the requirements which can be looked for in an instrument of the kind.”

Extract of a letter received from Dr. W. Bathurst Woodman, Translator and Editor of *Wunderlich's Medical Thermometry*, for the New Sydenham Society.—“The patent clinical thermometer I bought of you is a *decided* improvement on all the thermometers I have ever seen. It was a very carefully and beautifully made instrument, and exceedingly sensitive. I enclose an order for three more, which please add to my account enclosed.”

Extract from *Guy's Hospital Gazette*, Sept. 27th, 1873.—“Arnold and Sons' clinical thermometer is a conveniently-devised instrument, small enough to have all the conveniences of a small instrument, but which, by means of its case, can be so elongated as to have the advantages of the larger instruments.”

Dr. Robert Ellis writes:—“I like the thermometer you have sent better than any I have ever used, and I will never again use any other if I can help it.”

Dr. Moorhouse, of Ellesmere, writes:—“I have used the thermometer constantly for two years, and have not the least hesitation in saying that it is the most portable, safe, convenient, and at the same time reliable clinical thermometer I have met with.”



Fig. 139.

| | | | £ | s. | d. |
|---|----|----|-------|----|-----|
| Arnold and Sons' Clinical Thermometer, 4 in., in turned wood case, Fig. 139 | .. | .. | No. 4 | 0 | 5 6 |
| „ „ with magnified index | .. | .. | No. 4 | 0 | 7 0 |
| „ „ with indestructible index | .. | .. | No. 4 | 0 | 7 0 |
| „ „ with magnified and indestructible index, combined | .. | .. | No. 4 | 0 | 8 0 |



Fig. 140.

| | | | |
|--|---|----|----|
| | £ | s. | d. |
| Arnold and Sons' Self-registering Clinical Thermometer, in morocco case, lined velvet, Fig. 140 | 0 | 10 | 0 |

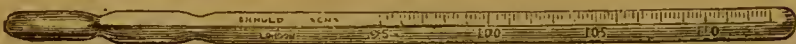


Fig. 141.

| | | | |
|---|---|----|---|
| Arnold and Sons' 3-in. Clinical Thermometer, 95° to 110°, red scale, with constricted bulb, in silver case, Fig. 141 | 0 | 12 | 6 |
|---|---|----|---|



Fig. 142.

| | | | |
|--|---|----|---|
| Arnold and Sons' 4-in. Clinical Thermometer, 95° to 110°, red scale, with constricted bulb, in ivory case, Fig. 142 | 0 | 10 | 6 |
|--|---|----|---|



Fig. 143.

| | | | |
|--|---|----|---|
| Arnold and Sons' 5-in. Clinical Thermometer, 95° to 110°, red scale, with constricted bulb, in ivory case, Fig. 143 | 0 | 11 | 6 |
|--|---|----|---|

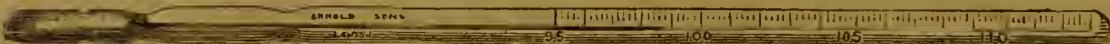


Fig. 144.

| | | | |
|--|---|----|---|
| Arnold and Sons' 6-in. Clinical Thermometer, 95° to 110°, red scale, with constricted bulb, in boxwood case, Fig. 144 | 0 | 10 | 6 |
| Arnold and Sons' Improved Self-registering Clinical Ther- mometer 4 in., with indelible glass-covered scale, in ebony case | 0 | 10 | 6 |

Extract from *Lancet*, March 4th, 1876:—"The construction of this instrument precludes the possibility of the reading scale becoming obliterated or indistinct."

Extract from *British Medical Journal*, March 4th, 1876:—"Messrs. Arnold and Sons have shown us an improved Clinical Thermometer, which is in all respects convenient and accurately made, and which has the special advantage that the markings are under glass; the advantages of this are obvious."

Extract from *Medical Times and Gazette*, March 4th, 1876:—"The special and important advantage of which is the graduated scale coated with glass, so as to make the markings absolutely indelible."

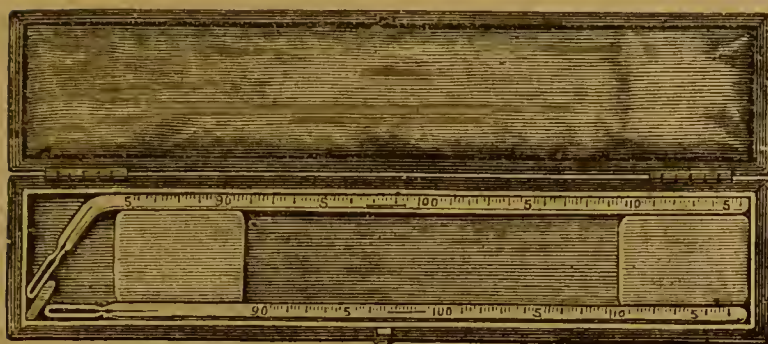


Fig. 145.

| | £ | s. | d. |
|--|---|----|----|
| Dr. Teale's Clinical Thermometers, with one bent bulb and one straight for surface or axilla, Fig. 145 | 0 | 15 | 0 |



Fig. 146.

| | | | | |
|------------------------------------|-----------|---|---|---|
| Bath Thermometer, Fig. 146 | 2s., 3s., | 0 | 5 | 0 |
|------------------------------------|-----------|---|---|---|



Fig. 147.

| | | | | | | |
|--|----|----|----------|---|---|---|
| Boxwood Thermometer, plain, Fig. 147 | .. | .. | .. | 0 | 1 | 0 |
| " " polished | .. | .. | 1s. 6d., | 0 | 2 | 0 |
| " " with enamel tube | .. | .. | .. | 0 | 2 | 6 |

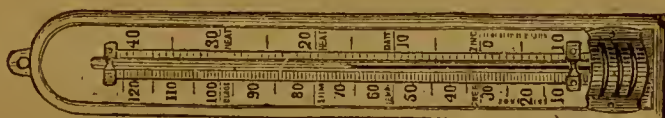


Fig. 148.

| | | | | |
|--|----------|---|---|---|
| Boxwood Thermometer, with enamel tube, the scale bevelled at the edges, very superior, Fig. 148 .. | 3s. 6d., | 0 | 4 | 6 |
|--|----------|---|---|---|



Fig. 149.

| | | | |
|--|---|----|---|
| Chemical Thermometer, with brass hinge and jointed boxwood scale to 400°, Fig. 149 | 0 | 7 | 6 |
| Ditto ditto 600° | 0 | 12 | 6 |



Fig. 150.

| | | | |
|--|---|---|---|
| Chemical Thermometer in wooden case, Fig. 150 | 0 | 5 | 0 |
| " " " graduated to 400° | 0 | 6 | 0 |

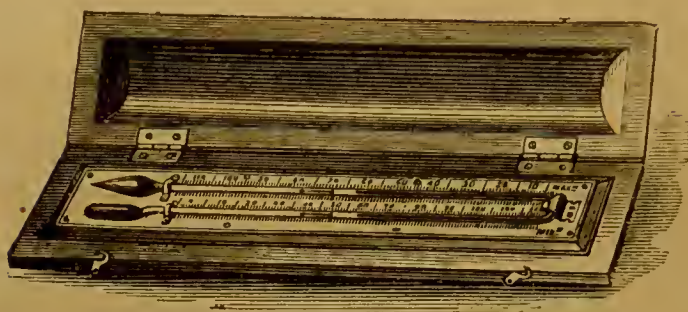


Fig. 151.

| | £ | s. | d. |
|--|---|----|----|
| Self-registering Thermometers, one each maximum and minimum, in morocco case, complete, Fig. 151.. | 1 | 1 | 0 |

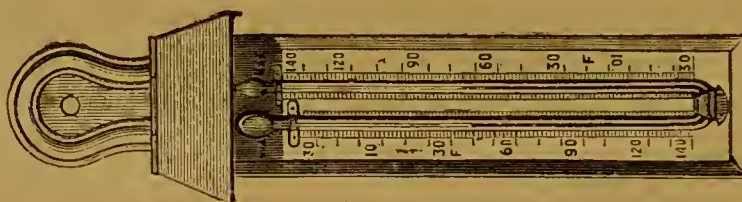


Fig. 152.

| | | | | |
|--|-----------------------|---|---|---|
| Six's Minimum Thermometer, on boxwood or metal scale, in japanned case, Fig. 152 .. | 10s. 6d., 15s., 17s., | 1 | 1 | 0 |
| Books of 25 Charts, for clinical thermometers, in cloth | | 0 | 2 | 0 |
| „ 50 ditto in leather covers and elastic bands | | 0 | 4 | 0 |
| „ 100 ditto ditto | | 0 | 8 | 0 |
| Arnold and Sons' Improved Temperature Charts, for 30 days per doz. | | 0 | 1 | 0 |
| Aneroid Barometer, in case | | 1 | 1 | 0 |
| „ in solid oak frame, with thermometer | | 2 | 2 | 0 |
| Carved solid oak Barometer, with enamel or ivory scales and double rack | | 5 | 5 | 0 |
| Large carved solid oak Barometer, with enamel or ivory scales, double rack, and floating gauge - | | 6 | 6 | 0 |



Fig. 153.

| | | | |
|---|---|---|---|
| Argentometer, for nitrate of silver, Fig. 153 | 0 | 2 | 6 |
|---|---|---|---|



Fig. 154.

| | | | |
|--|---|---|---|
| Class Hydrometer, for heavy fluids, Fig. 154 | 0 | 4 | 6 |
|--|---|---|---|

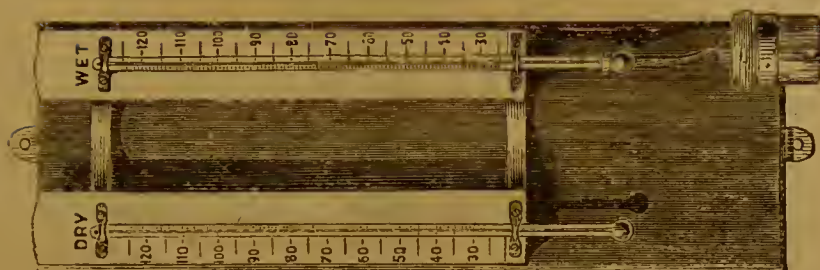


Fig. 155.

| | | | |
|---|---|----|----|
| Mason's Wet and Dry Bulb Hygrometer, on stand, Fig. 155 | £ | s. | d. |
| | 1 | 15 | 0 |

A valuable instrument in the sick chamber, for by its means an artificial humidity and temperature of the air can be maintained, in many cases so essential to recovery.

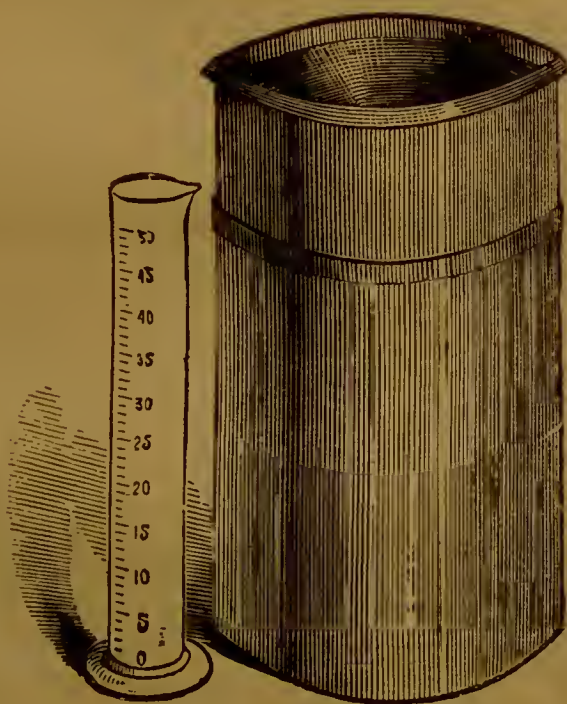


Fig. 156.

| | | | |
|---|---|----|---|
| Rain Gauge, Glaisher's, complete in japanned tin, Fig. 156 | 0 | 16 | 0 |
| " " in copper | 1 | 10 | 0 |



Fig. 157.

| | £ | s. | d. |
|--|---|----|----|
| Rain Gauge, Howard's, complete in japanned tin, Fig. 157 | 0 | 8 | 0 |
| „ „ in copper | 0 | 12 | 0 |

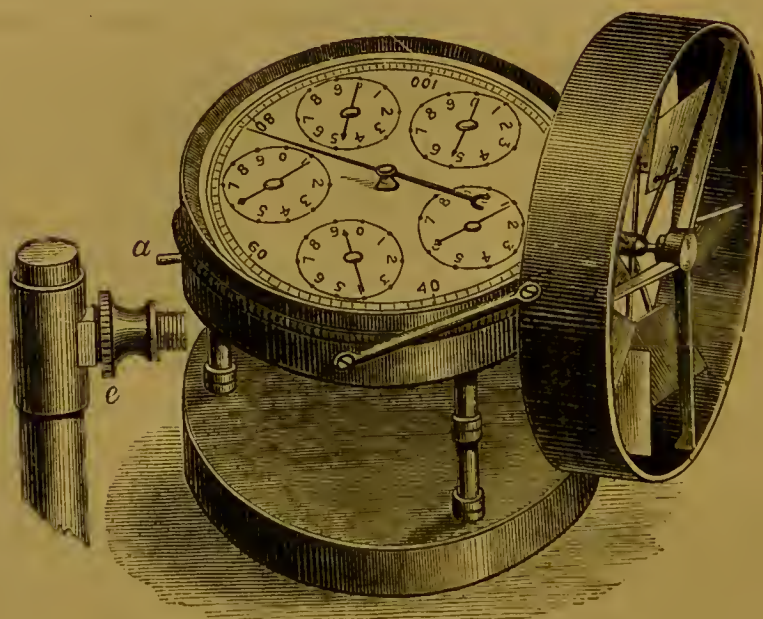


Fig. 158.

| | | | | | |
|-------------------------------|----|---------------------|---|---|---|
| Air Meter, improved, Fig. 158 | .. | £3 3s., £4 4s., and | 5 | 5 | 0 |
|-------------------------------|----|---------------------|---|---|---|

CAUSTIC CASES, ETC.



Fig. 159.

| | | | | | | £ | s. | d. |
|---|---------------------------|----|----|-------------|--|---|----|----|
| Caustic Case, silver, Arnold and Sons' improved, with seam- | | | | | | | | |
| less tube and platina spring holder, adjustable to any | | | | | | | | |
| size, caustic, Fig. 159 | .. | .. | .. | small size | | 0 | 12 | 6 |
| " " | .. | .. | .. | medium size | | 0 | 15 | 0 |
| " " | .. | .. | .. | large size | | 0 | 17 | 6 |
| " " | silver (plain holder) | .. | .. | | | 0 | 6 | 6 |
| " " | ivory | .. | .. | | | 0 | 2 | 0 |
| " " | ebonite | .. | .. | | | 0 | 2 | 6 |
| " " | with silver-plated holder | .. | .. | | | 0 | 3 | 6 |
| " " | electro-plated.. | .. | .. | | | 0 | 3 | 6 |
| " " | " with exploring needle | .. | .. | | | 0 | 7 | 6 |
| " " | platinum | .. | .. | | | 1 | 15 | 0 |

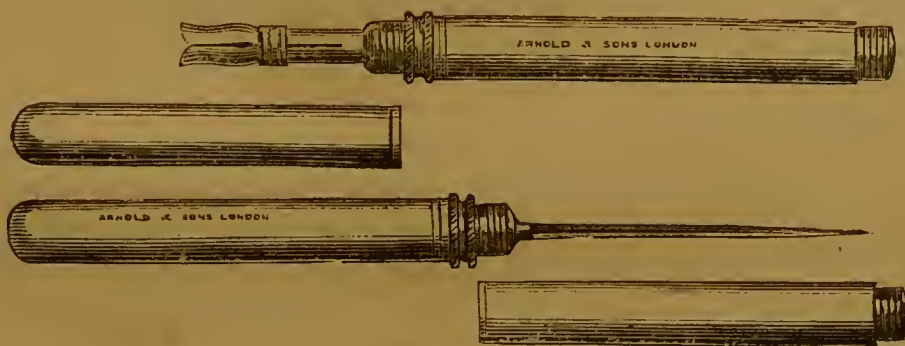


Fig. 160.

| | | | | | | | | |
|---|----|----|----|----|--|---|----|---|
| Caustic Case, Arnold and Sons' silver, seamless tube, and | | | | | | | | |
| exploring needle, Fig. 160 | .. | .. | .. | .. | | 0 | 17 | 6 |

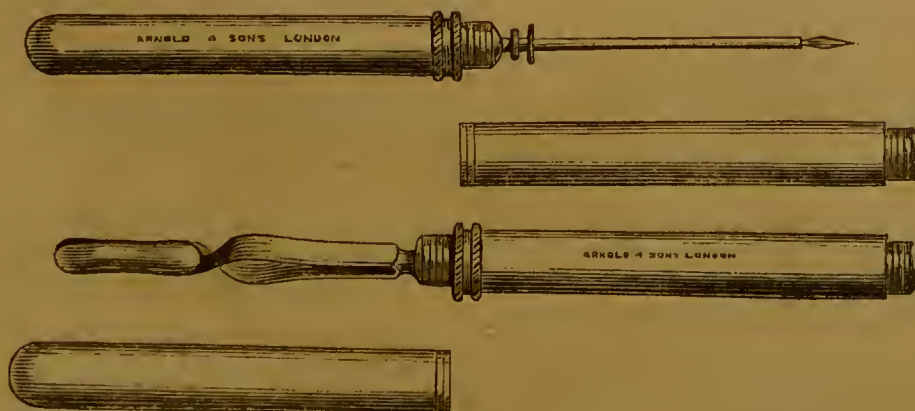


Fig. 161.

| | | | | | | | | |
|--|----|----|----|----------|--|---|---|---|
| Caustic Case, Arnold and Sons' silver, seamless tube, with | | | | | | | | |
| exploring trocar, Fig. 161 | .. | .. | .. | .. | | 1 | 0 | 0 |
| Caustic Points moulded to fit caustic cases.. | | | | per doz. | | 0 | 8 | 0 |

TRUSSES FOR THOROPIN, BOG SPAVIN, PROLAPSE, ETC.

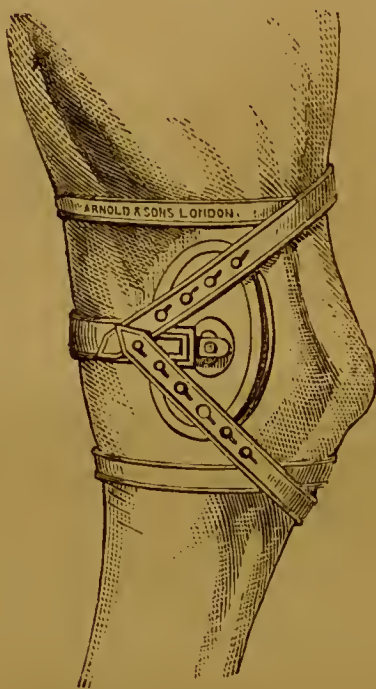


Fig. 162.

| | | | |
|---|---|----|----|
| | £ | s. | d. |
| Arnold and Sons' improved Thoropin Truss, Fig. 162 .. | 1 | 1 | 0 |

This truss supersedes firing, blistering, and the necessity of turning out, as the animal may be kept at gentle work.

DIRECTIONS FOR APPLYING THE TRUSS.

Place the pads on each bursal enlargement, the pad with the studs in it on the outside of the limb; pass one strap round *above* the hock, and fasten on to the stud in the pad outside, and the other strap *below* the hock in like manner.

When first commencing treatment, be careful not to wear the truss too long at a time, not more than about two or three hours, gradually increasing the action daily.

| | | | |
|---|---|----|---|
| Thoropin Truss, plain pattern | 0 | 15 | 0 |
| " " improved, with 6 holes to adjust to size .. | 1 | 1 | 0 |
| " " and Bog Spavin combined, plain pattern .. | 1 | 1 | 0 |
| " " " " improved .. | 1 | 5 | 0 |

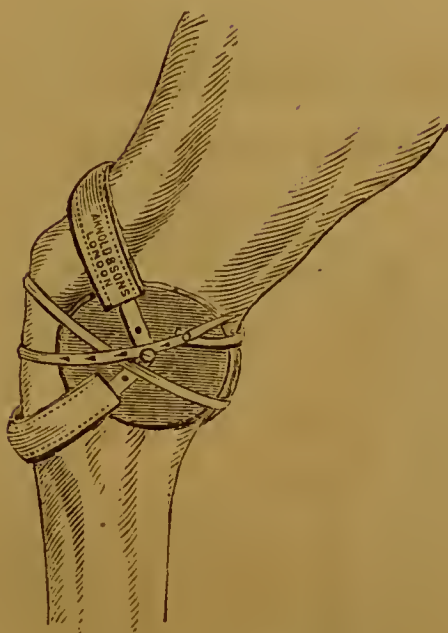


Fig. 163.

| | | £ | s. | d. |
|---|----|---|----|----|
| Thoropin Truss, improved by Mr. Wilson, Fig. 163 | .. | 1 | 10 | 0 |
| Prolapsus Uteri Apparatus, by Mr. Chattell | .. | 1 | 1 | 0 |
| " " by Mr. Gowing | .. | 3 | 0 | 0 |
| Umbilical Hernia | .. | 1 | 10 | 0 |
| " " Arnold and Sons' improved | .. | 2 | 10 | 0 |

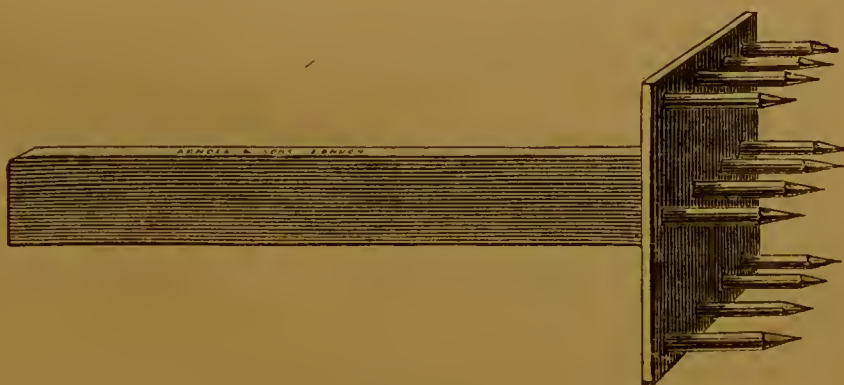


Fig. 164.

Spavin Punches, Fig. 164 7s. 6d., 10s. 6d., and 0 15 0

BULL RINGS, BULL HOLDERS, EAR MARKERS, AND PUNCHES.



Fig. 165.

| | £ | s. | d. |
|--|---|----|----|
| Copper Bull Ring, with double joints, Fig. 165 | 0 | 3 | 0 |
| Iron | 0 | 2 | 0 |
| Copper Pig Rings ls. and | 0 | 2 | 0 |

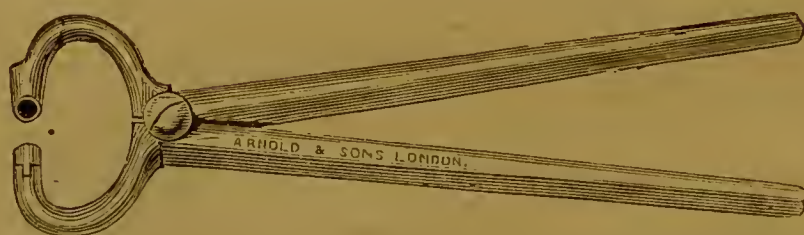


Fig. 166.

| | | | |
|--|---|----|---|
| Bull Nose Punch, for cutting out the piece of cartilage prior to placing in the ring | 0 | 15 | 0 |
| " " polished | 1 | 5 | 0 |
| " " A. & Sons' improved, extra superior | 1 | 10 | 0 |
| Forceps for ringing bulls by burning | 0 | 12 | 6 |
| Bull Holder, black, very portable | 0 | 5 | 0 |
| " folding, with spring button | 0 | 10 | 6 |
| " with screw and spring | 0 | 7 | 6 |
| " " rack | 0 | 7 | 6 |

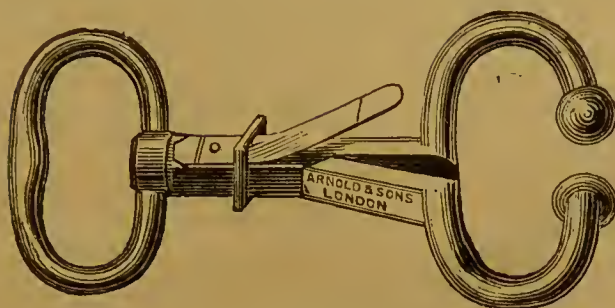


Fig. 167.

| | £ | s. | d. |
|---|------|-----|-----|
| Bull Holder, Arnold and Sons' portable, with slide and spring, Fig. 167 | 12s. | 6d. | and |
| " " oval, with hinge and spring slide .. | 0 | 12 | 6 |
| Bull Leader, improved, with long pole | 1 | 10 | 0 |

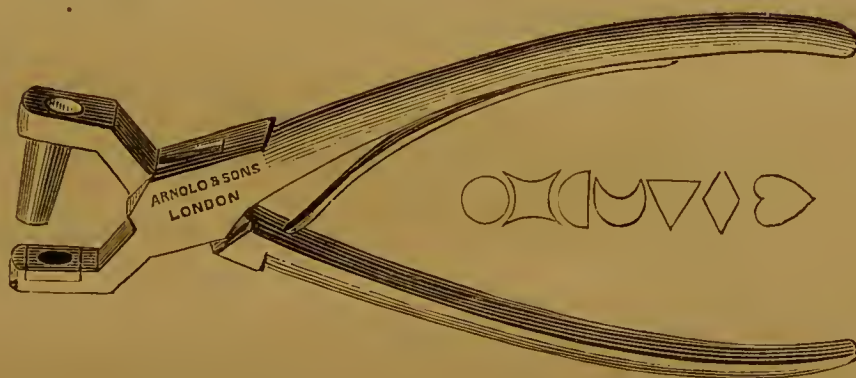


Fig. 168.

| | | | | | | |
|--|------|-----|-----|---|----|---|
| Ear Markers for pigs, sheep, &c., various patterns, Fig. 168 | 7s. | 6d. | to | 0 | 12 | 6 |
| „ for cattle | 10s. | 6d. | and | 0 | 15 | 0 |

HOOF INSTRUMENTS.

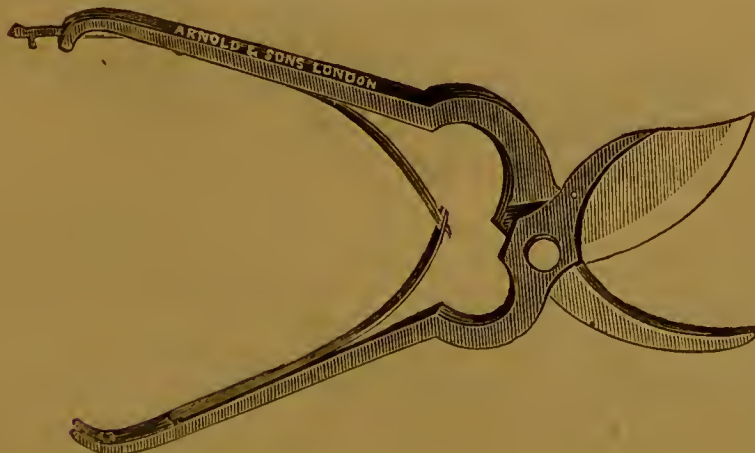


Fig. 169.

| | | | |
|---|---|----|---|
| Hoof Cutters, with spring, Fig. 169 | 0 | 10 | 6 |
|---|---|----|---|



Fig. 170.

| | £ | s. | d. |
|--|---|----|----|
| Hoof Cutters, very powerful, Arnold and Sons' improved | 0 | 12 | 6 |
| „ „ with long wood handles, Fig. 170 | 0 | 15 | 0 |

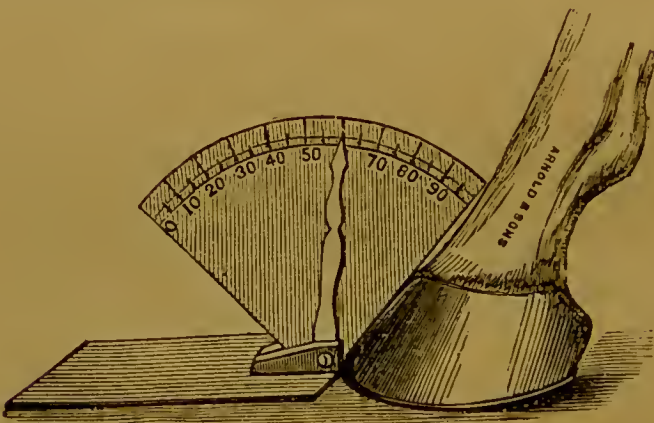


Fig. 171.

| | | | |
|--|---|---|---|
| Hoof Instrument for ascertaining the angle of the foot, by Mr. Fleming, R.E., Fig. 171 | 1 | 1 | 0 |
| Forceps for testing foot lameness, by Prof. Varnell | 1 | 0 | 0 |
| Horses' Hoofs, mounted in various designs, gold and silver, to order | | | |

CLIPPING, TRIMMING, AND SINGEING INSTRUMENTS.

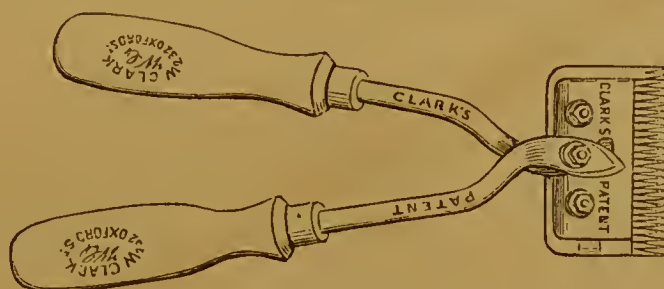


Fig. 172.

| | | | £ | s. | d. |
|--|----|----|---|----|----|
| Horse Clipper, plain pattern, Fig. 172 | .. | .. | 0 | 5 | 0 |

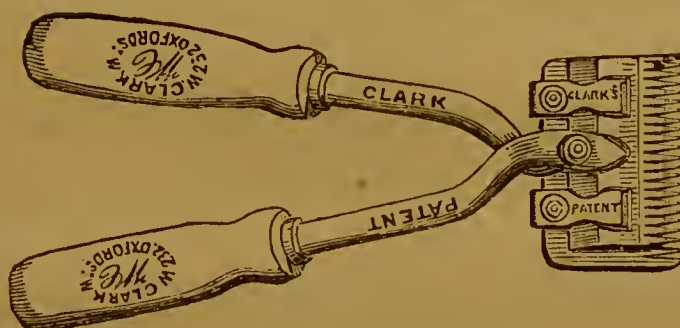


Fig. 173.

| | | | | | |
|--|----|----|---|----|---|
| Horse Clipper (Clark's), with patent grasshopper springs over the plates, Fig. 173.. | .. | .. | 0 | 15 | 0 |
| Patent Horse Clippers, Adie's, large | .. | .. | 0 | 12 | 0 |
| " " " small, with spring | .. | .. | 0 | 12 | 6 |
| " " " improved, with extra strong lever bolt and nut | .. | .. | 0 | 15 | 0 |

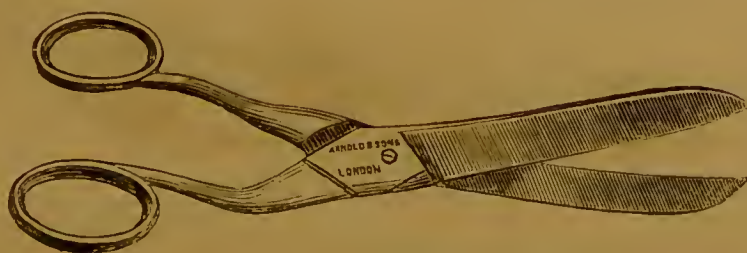


Fig. 174.

| | | | | | |
|---|----|----|---|---|---|
| Clipping Scissors, very superior, small, Fig. 174 | .. | .. | 0 | 4 | 6 |
| " " " medium | .. | .. | 0 | 5 | 6 |
| " " " large | .. | .. | 0 | 6 | 6 |
| " " " with leather-covered bows | .. | .. | 0 | 7 | 6 |
| " Combs, horn | .. | .. | 0 | 1 | 0 |
| " " steel | .. | .. | 0 | 2 | 6 |
| " " German silver | .. | .. | 0 | 2 | 0 |

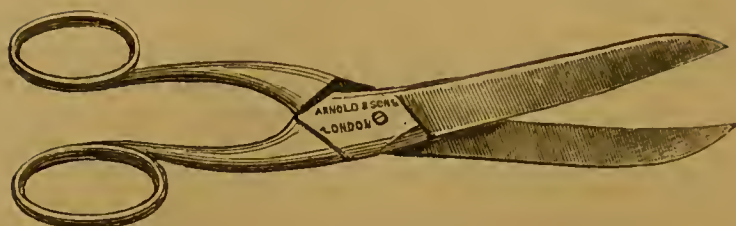


Fig. 175.

| | £ | s. | d. |
|--|---|----|----|
| Trimming Scissors, Arnold and Sons' improved, with curved blades, Fig. 175 3s. 6d., 4s. 6d., and | 0 | 5 | 6 |
| „ Shears 3s. 6d. to | 0 | 4 | 6 |
| Sheep Shears.. .. . 3s. to | 0 | 4 | 6 |
| Singeing Apparatus, with 12 feet elastic tubing | 0 | 12 | 6 |
| „ „ A. and Sons' improved, with ball-and-socket joint, prevents the possibility of the tube twisting, with 12 feet superior elastic web tubing, and 2 burners, &c., complete | 1 | 1 | 0 |
| „ Lamps | 0 | 3 | 0 |
| „ „ Deacon's patent, in bronze | 0 | 5 | 0 |
| „ „ „ in copper | 0 | 5 | 6 |
| Poultry Singers | 0 | 7 | 6 |
| Eye Blinds, for singeing | 0 | 7 | 6 |

SANDCRACK INSTRUMENTS.

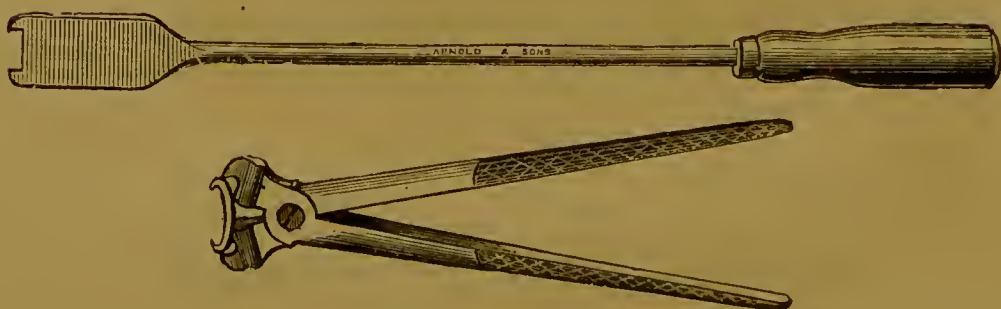


Fig. 176.

| | | | |
|---|---|----|---|
| Sandcrack Instruments, with forceps, iron, and 3 dozen clamps, complete, Fig. 176 | 1 | 10 | 0 |
| „ Forceps, by Prof. Pritchard | 1 | 1 | 0 |
| „ Iron | 0 | 5 | 0 |
| „ Clamps per doz. | 0 | 2 | 6 |
| Sandcrack Instruments, by Mr. South, in leather case. complete | 2 | 2 | 0 |

SPRAY PRODUCERS.



Fig. 177.

| | £ | s. | d. |
|---|---|----|----|
| Patent Flexible Spray Producer, No. 2, large size, Fig. 177 | 0 | 10 | 6 |
| „ „ „ „ No. 1, small „ „ „ | 0 | 5 | 0 |

The above is an improved form of spray producer, with a flexible tube, so as to adjust at any required angle.



Fig. 178.

| | £ | s. | d. |
|---|---|----|----|
| Patent Flexible Spray Producer, with 3 pliable tubes for dressing by the antiseptic treatment, or disinfecting, | | | |
| Fig. 178 | 1 | 1 | 0 |

The above is fitted with 3 pliable tubes, so that any direction can be given to the fluid. It is also fitted with a tap, that the spray may be stopped at any moment.

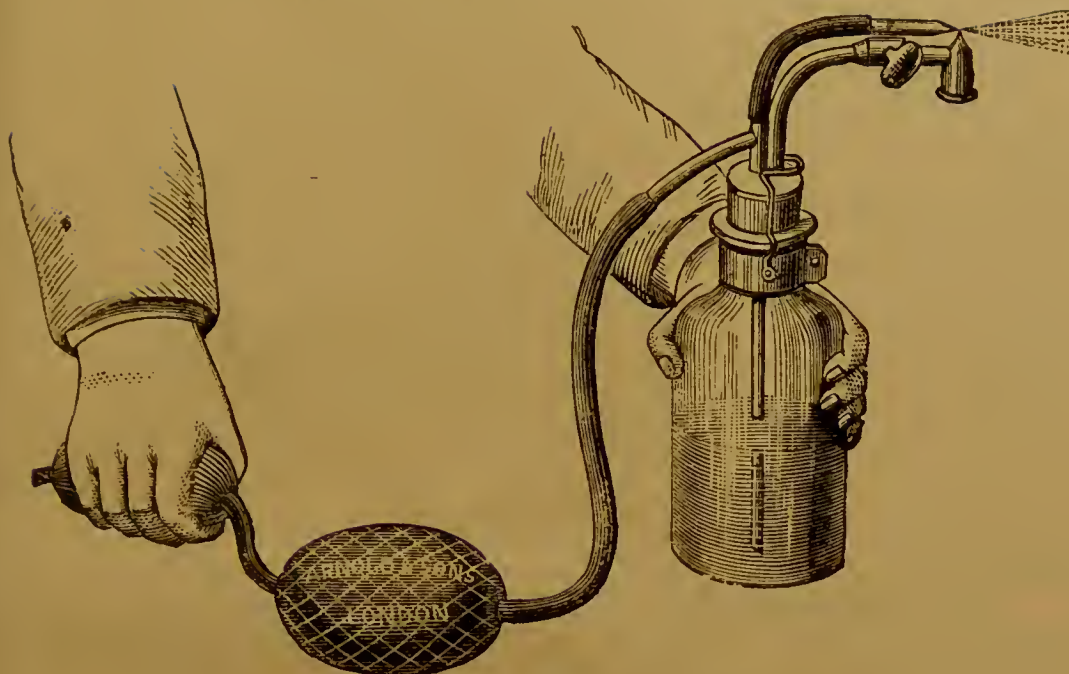


Fig. 179.

| | £ | s. | d. |
|---|---|----|----|
| Hand Spray Producer, with regulating tap, for carbolic, &c., Fig. 179 | 1 | 5 | 0 |

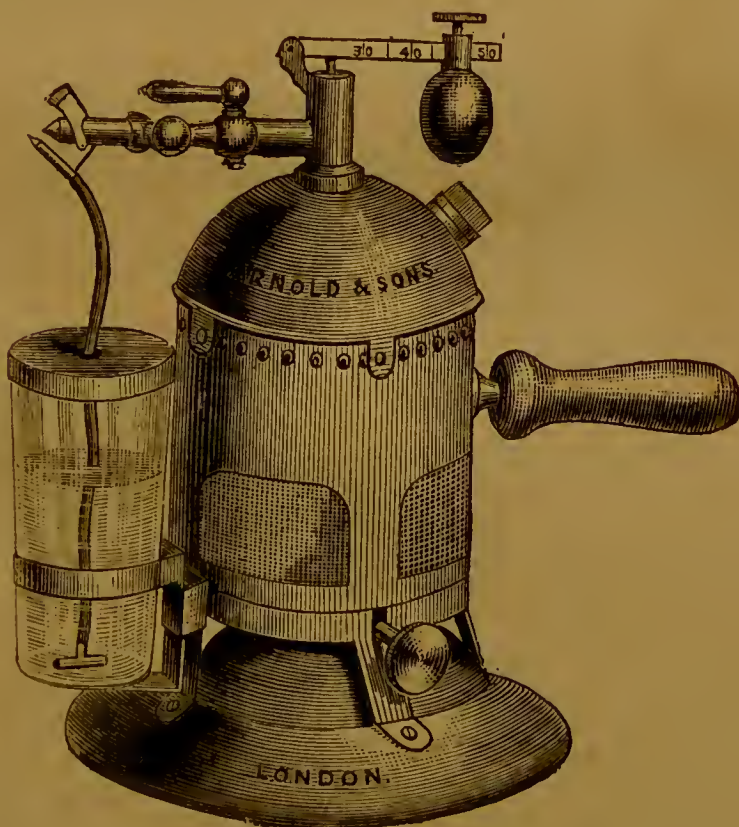


Fig. 180.

| | | | |
|---|---|---|---|
| Steam Spray Producer, for antiseptic treatment, large size, No. 1, Fig. 180 | 8 | 8 | 0 |
| „ „ „ No. 2 medium size | 6 | 6 | 0 |
| „ „ „ No. 3 small size | 4 | 4 | 0 |

The above engraving represents a steam spray producer, with a boiler of sufficient capacity to maintain an uninterrupted spray for nearly two hours, and which has been tested with a pressure of 100 lbs. The valve is graduated to serve the purpose of both safety valve and pressure gauge.

These spray producers are all thoroughly tested, and being brazed are not liable to explode, as is the case where the boilers are soldered. The lamp is constructed of as simple a form as possible, and having a circular wick diffuses the heat over the lower part of boiler, which is globular. The wick can be readily raised or lowered by a rack arrangement connected with the handle.

DIRECTIONS FOR USE.

The boiler should be three parts filled with water (hot water is preferable, as it economises both time and spirit). Three parts fill the lamp with methylated spirit. After lighting the lamp time should be allowed for the flame to ignite the vapour at the holes round the circular wick. In case the rack becomes stiff a small quantity of oil can be used to loosen it. It is unnecessary to use either oil or grease to the steam joints or stop-cock.

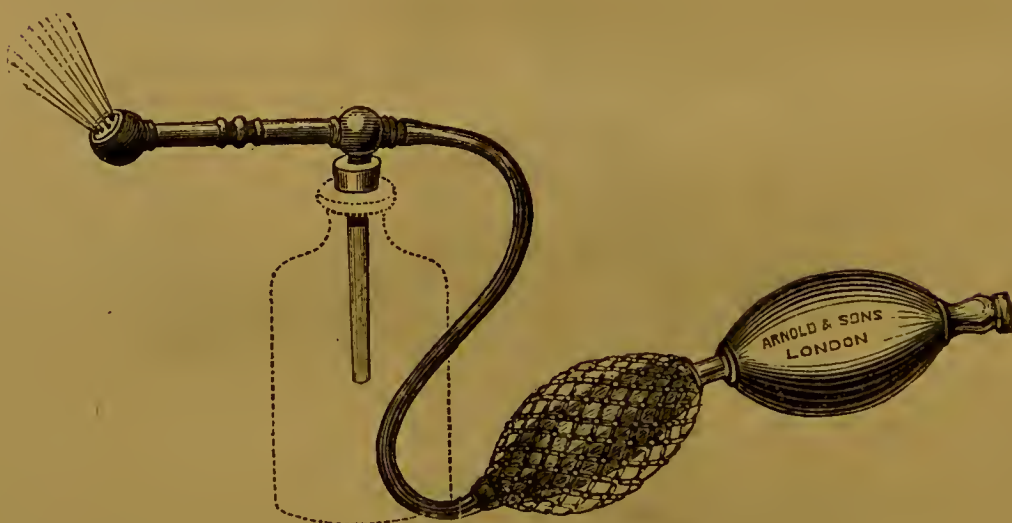


Fig. 181.

| | £ | s. | d. |
|--|---|----|----|
| Ebonite Spray Producer, with covered end, in case, Fig. 181 | 1 | 0 | 0 |
| Anæsthetic Cabinet, A. and Sons' improved, containing metal bottle, covered velvet, double jets, and 16 oz. bottle of Robbins and Co.'s prepared ether | 2 | 2 | 0 |

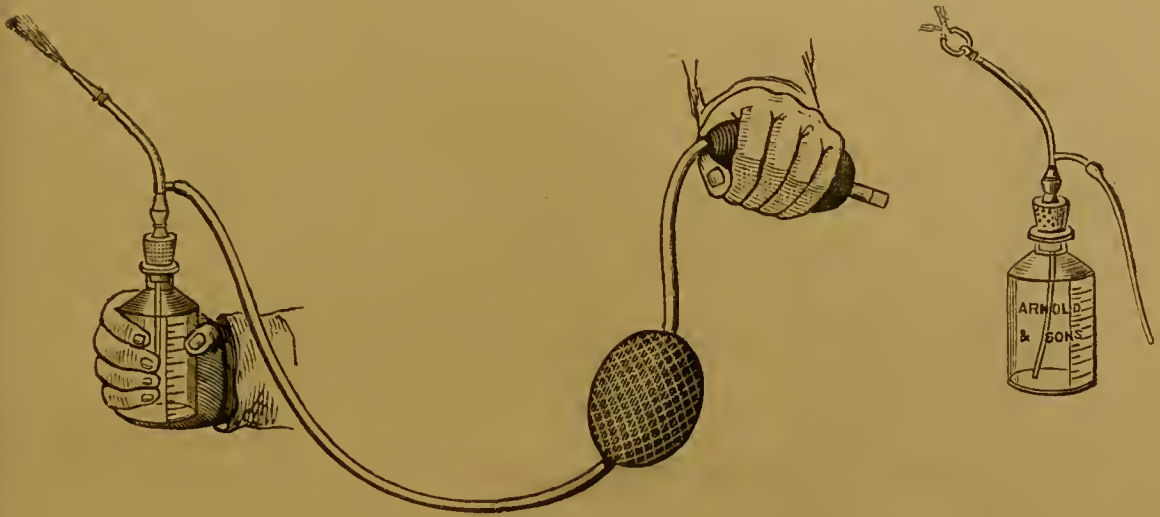


Fig. 182.

| | £ | s. | d. |
|--|---|----|----|
| Anæsthetic Spray Apparatus, with single jet and glass bottle, in mahogany case, Fig. 182 | 0 | 16 | 0 |
| „ Ether, Robbins and Co.'s, in pint stoppered bottles | 0 | 7 | 6 |

ASPIRATORS.

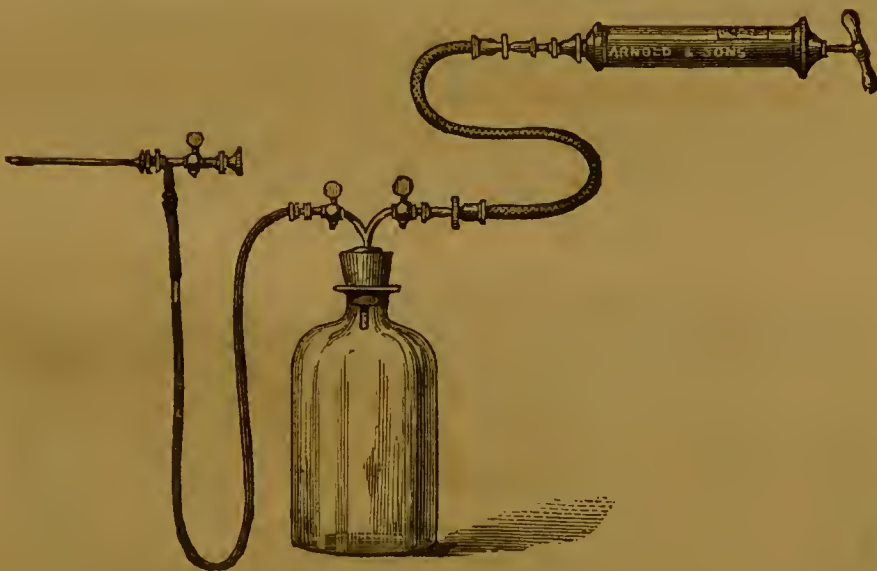


Fig. 183.

| | | | |
|--|---|---|---|
| Aspirator, improved by Mr. Fleming, with needles, &c., complete in mahogany case, Fig. 183 | 7 | 7 | 0 |
|--|---|---|---|

EXTRACT FROM "PROCEEDINGS OF THE BRITISH NATIONAL VETERINARY CONGRESS."

"Mr. Fleming said: Messrs. Arnold have listened to my propositions in regard to improvements in the aspirator, with a view to using the instrument without much injury to the animal.

The action of the instrument, and the method of using it, are of the simplest character. You have a pump which exhausts the air of the vessel, and you pump the air out of the vessel; there is then a vacuum, and you perform your operation. If the skin is tender, you leave it tight, and cut it with a small pair of scissors, and then gradually pass the sharp point into the cavity. By turning the stop catch the pus is sucked out. You empty your bottle, use your pump again to make a vacuum, and so go on. I wish this instrument were more generally known in our practice. I think where you have extreme distention of bursæ or capsules of joints you have more chance of saving your patient with this than with the ordinary means. It is not so barbarous as using more ordinary means. I think it is well worthy your attention."

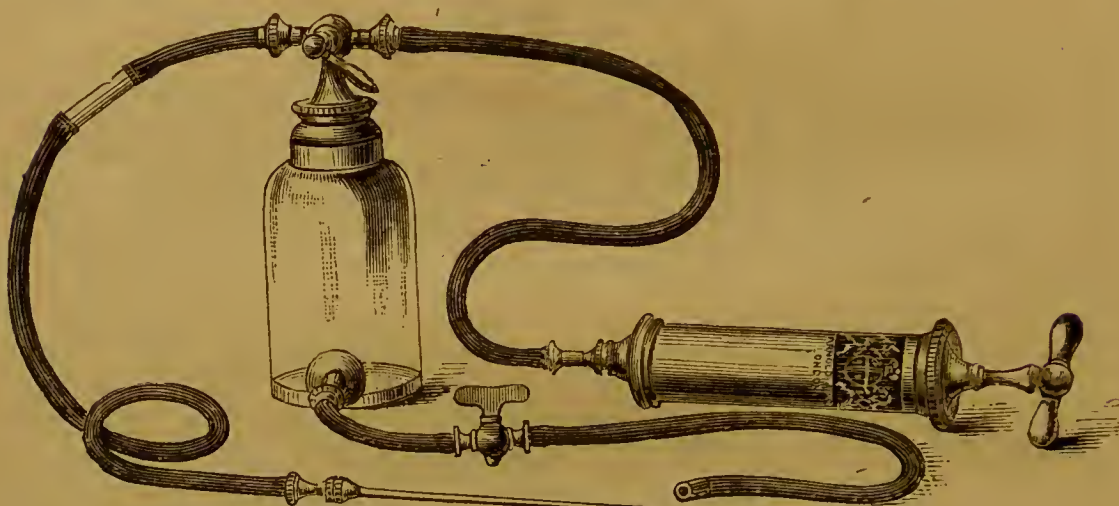


Fig. 184.

£ s. d.

Aspirator, A. and Sons' improved, with glass reservoir, exhausting syringe, 6 seamless tube gilt needles, 2-way stopcock, complete in morocco case, Fig. 184 5 5 0

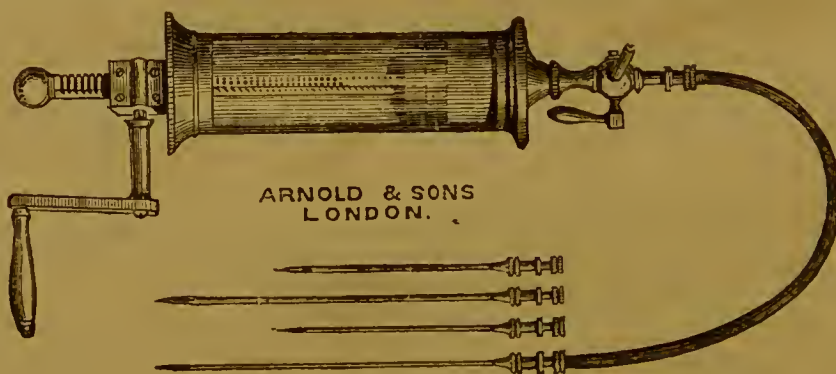


Fig. 185.

Aspirator, with improved rack and pinion movement, to enable the operator to draw up the plunger without exertion, complete in morocco case, Fig. 185 4 10 0
 " Potain's, with india-rubber cork, air pump, 3 trocars, 2 needles, 3 canulas, and 3 blunt trocars, in mahogany case, complete 4 4 0



Fig. 186.

| | £ | s. | d. |
|--|---|----|----|
| Aspirator, A. and Sons' improved, with india-rubber cork to fit any size bottle, and 2 needles, in mahogany case, complete, Fig. 186 | 1 | 10 | 0 |

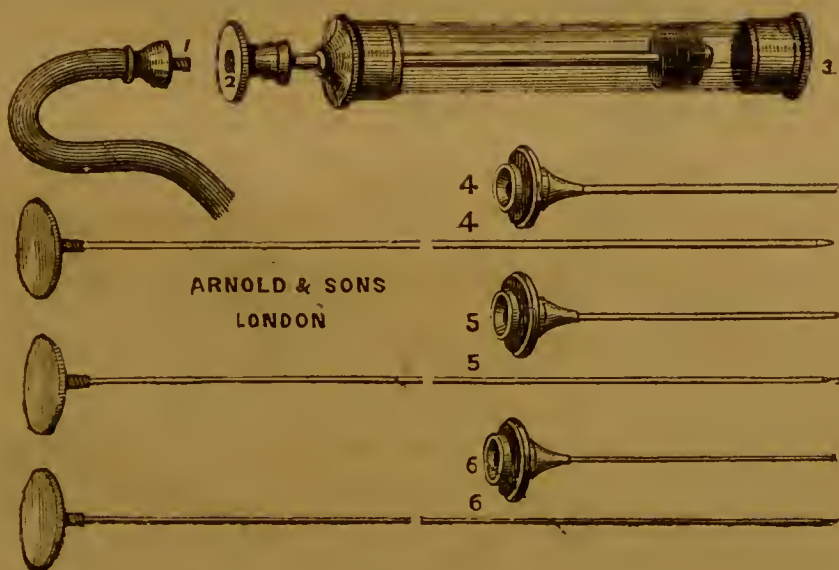


Fig. 187.

| | | | |
|--|---|---|---|
| Aspirator, Arnold & Sons' Small Exploring, in leather case, complete, Fig. 187 | 2 | 2 | 0 |
|--|---|---|---|

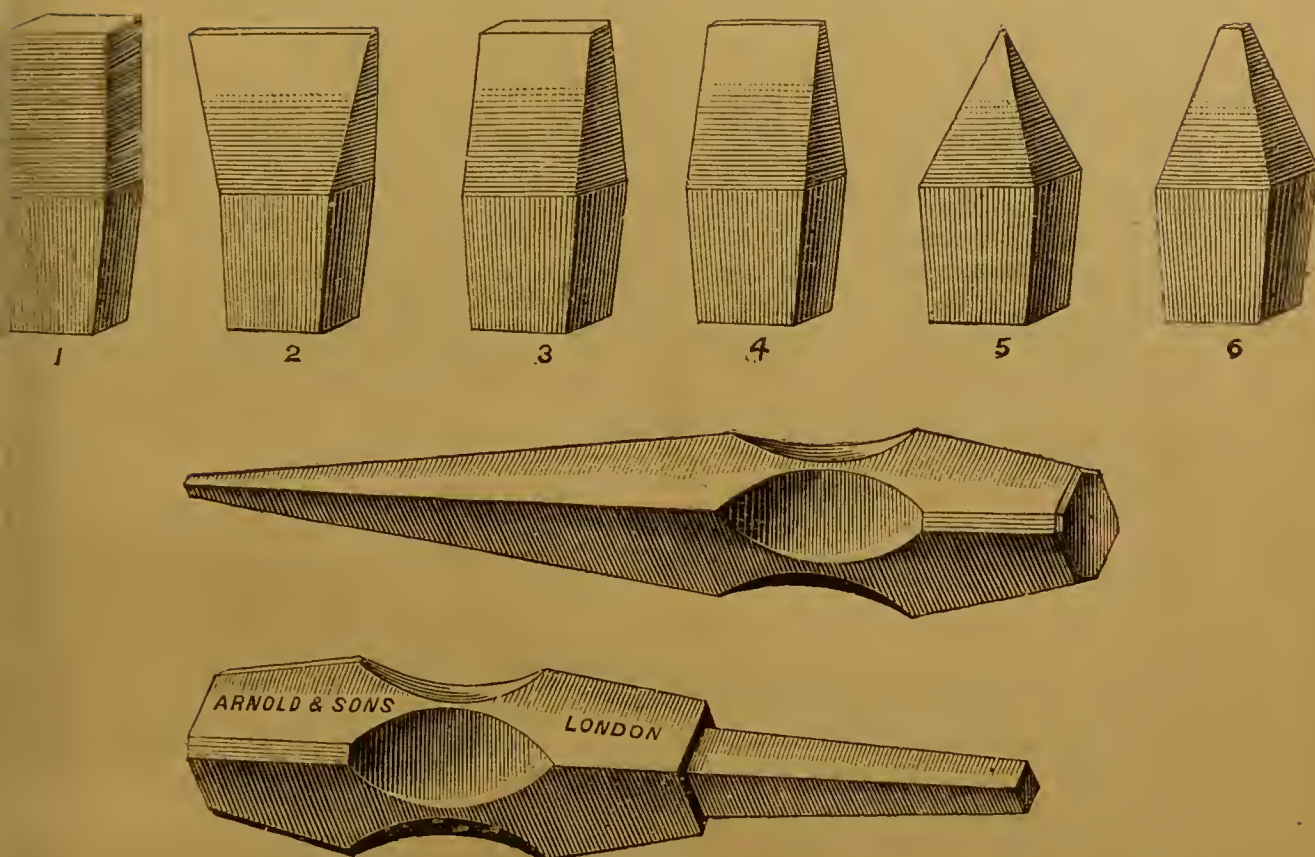


Fig. 189.

The above Woodcuts are the exact sizes of the Frost Cogs suitable for draught work.

| | £ | s. | d. |
|---|---|----|----|
| Arnold and Sons' Improved Steel Frost Cogs, large size, Nos. 1, 2, 3 per doz. | 0 | 3 | 0 |
| " " " Nos. 4, 5, 6 " | 0 | 3 | 6 |
| 1 pair of Punches for above, Fig. 189 | 0 | 5 | 0 |
| 1 set, consisting of 2 dozen Improved Steel Frost Cogs and 2 Punches, complete, large size | 0 | 10 | 6 |
| A Shoe, with hole punched as a pattern for the farrier .. | 0 | 1 | 0 |
| Extra large size made, suitable for brewers, coal merchants, and others.. .. . per doz. | 0 | 4 | 0 |

Extract from "Practical Horse-Shoeing," page 114.

"This merely consists of a square piece of steel, about the same length as the screw-stud, which is pointed and tempered at one end (that which comes into contact with the ground or ice) and flat at the other end. This fits into a similar-shaped hole at the extremity of each branch of the shoe, and, if thought necessary, in the middle or at each side of the toe.

"This hole should be very slightly tapering from the lower to the upper (or foot) surface, and it should be of such a size that the square stud will require a slight tap or two to make it fit in tightly, yet without projecting at all beyond the level of the foot-surface of the shoe. I was at first in doubt as to whether the studs would remain in during work, or while the horse was standing in the stable; but, to my surprise, they were firmly retained in the shoes for a month, though subjected to every kind of test except on ice, which the season has not afforded.

"A few blows on each side are sufficient to slacken them when they require to be removed as no longer necessary, when worn out, or when they require to be re-sharpened. The weight of the horse evidently keeps them tightly fixed in the shoe, and, from their being of the same thickness throughout, there is little risk of their breaking. It would be advisable, I think, to have the shoes a little thicker and broader at the places where the holes are to be made. I anticipate that this mode of rendering all kinds of horses efficient during frost will be found eminently successful and very inexpensive, and one readily carried out anywhere in a very short time."

*Extract of Letter received from C. T. S. BIRCH REYNARDSON, Esq.,
Holypwell Hall, Stamford, Nov. 4th, 1880.*

"The 'Frost Cogs' that I had from you last year answered so well, that I should be glad if you would be so good as to send me a few of your circulars and drawings of the shoes, cogs, punches, &c., &c., and I only hope that they may be the means of opening people's eyes to a very *simple* way of keeping their horses on *their* legs, and from breaking *their* knees, and perhaps *their* owners' necks, in frosty weather. The whole matter is so simple that no one should be without half-a-dozen cogs in his waistcoat pocket. I have given orders to my blacksmith to put all shoes on after this date with holes ready punched in them, that there may be no bother in removing them when frost sets in. I hear people say, 'Oh! I use the same *kind* of thing, but mine *serve* in, which must be a better plan.' My experience tells me that the cogs answer, and the *serews* do not."

*Extract of Letter received from W. B. HULTON, Esq., Hulton
Park, Bolton-le-Moors.*

"I purchased from you last winter some small cogs and two punches, for a pony, with which I am well pleased, and shall now be obliged if you will send me about four dozen cogs and pair of punches, suitable for full-sized carriage-horses, 16.1 hands."

*Extract of a Letter received from THOS. BLAND GARLAND, Esq.,
Hillfields, Reading.*

"Please to send me six dozen by post to-morrow, exactly like these. I used them last winter, and several times this winter, for carriage work, two in the heels of each shoe, and have only lost one cog, from, I believe, a defect in punching the hole."

The above cogs are all hand-made, and of the very best steel, filed perfectly square to fit accurately, and are properly hardened and tempered.

STEEL SCREW FROST COGS.

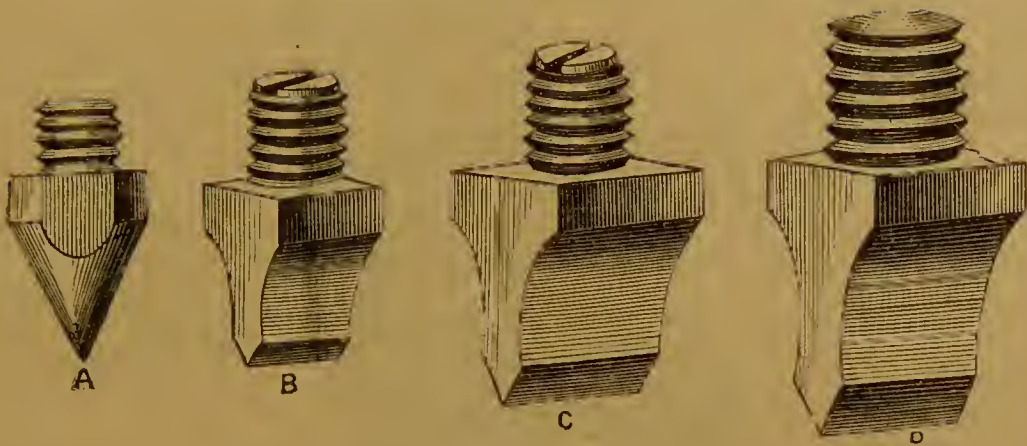


Fig. 190.

The above Woodcuts are the exact sizes of the Frost Cogs

| | | | £ | s. | d. |
|---|----|----------|---|----|----|
| Screw Frost Cogs, $\frac{5}{16}$ in. screw, A | .. | per doz. | 0 | 3 | 0 |
| " " " " B | .. | " | 0 | 3 | 0 |
| " " " " C | .. | " | 0 | 3 | 6 |
| " " " " D | .. | " | 0 | 4 | 6 |
| 1 set, consisting of 2 doz. Screw Frost Cogs, with 2 taps and spanner, complete | .. | .. | 0 | 12 | 0 |
| Blanks for Fig. A | .. | per doz. | 0 | 3 | 0 |

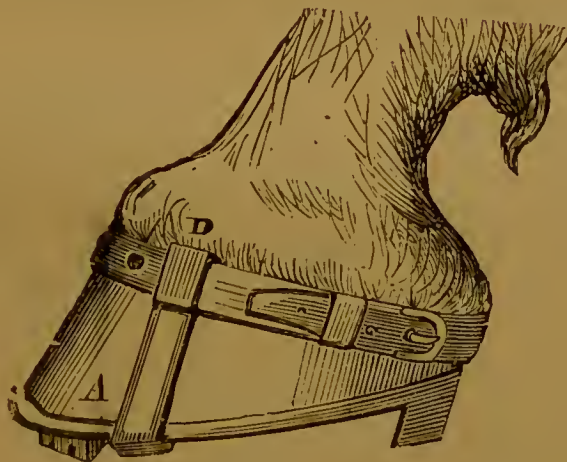


Fig. 191.

Roughing Shoes, with straps, &c., complete, any size, Fig. 191

| | | | | | |
|--|---|--------------|---|---|---|
| No. 1, for shoes $\frac{3}{4}$ in. wide. | No. 3, for shoes $1\frac{1}{4}$ in. wide. | per set of 4 | 0 | 6 | 0 |
| No. 2, " 1 in. " | No. 4, " $1\frac{1}{2}$ in. " | | | | |

OPHTHALMOSCOPES.

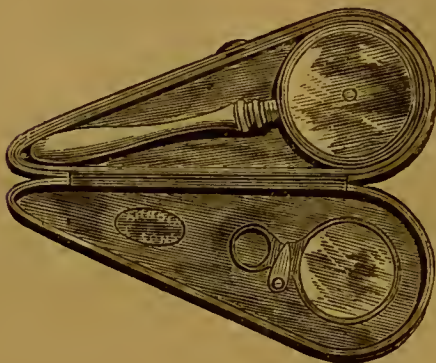


Fig. 192.

| | £ | s. | d. |
|---|------|-----|------------|
| Ophthalmoscope, with reflector and magnifying lens, in leather case, Fig. 192 | 12s. | 6d. | and 0 15 0 |

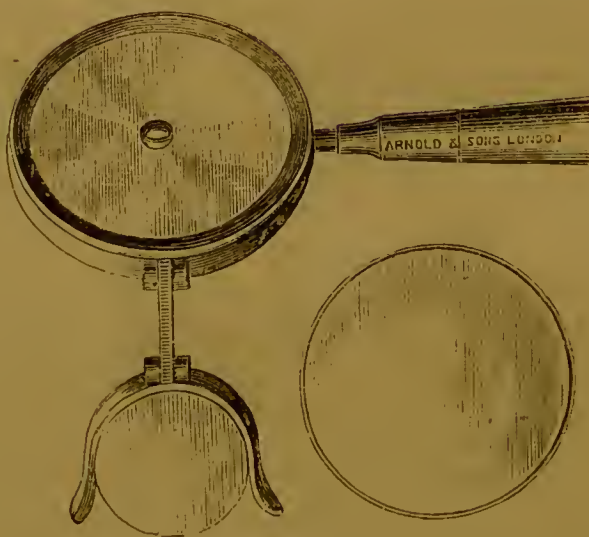


Fig. 193.

| | | |
|--|------|-----------|
| Ophthalmoscope, Liebreich's, with lenses, &c., complete, in leather case, Fig. 193 | 16s. | and 1 0 0 |
|--|------|-----------|

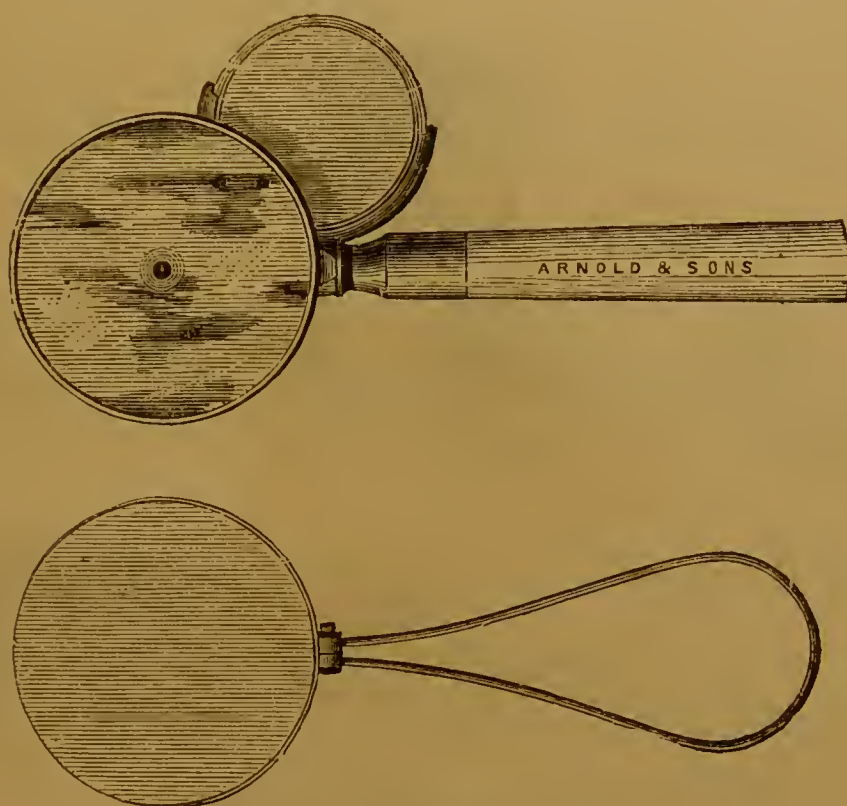


Fig. 194,

| | £ | s. | d. |
|--|---|----|----|
| Ophthalmoscope, improved by Prof. Brown, with lenses, &c., complete, in portable leather case, Fig. 194 | 1 | 1 | 0 |



Fig. 195.

| | | | | |
|--|--------------|---|----|---|
| Ophthalmoscope, A. and Sons' improved portable, in vul- canite case, for the pocket, Fig. 195 | 10s. 6d. and | 0 | 12 | 6 |
| „ by Prof. Brown, for students' use, in case | | 0 | 7 | 6 |



Fig. 196.

| | | £ | s. | d. |
|---|--------------|---|----|----|
| Ophthalmoscope, in leather case, Fig. 196.. | 12s. 6d. and | 0 | 15 | 0 |

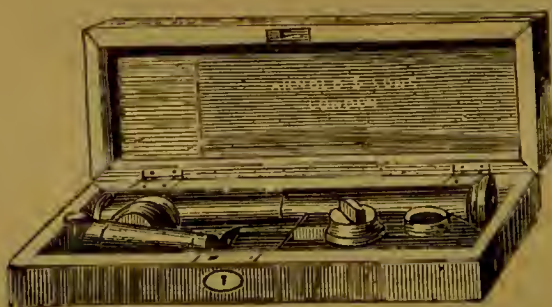


Fig. 197.

| | | | | |
|--|----------|---|----|---|
| Ophthalmoscope, Beale's self-illuminating, in mahogany case, complete, Fig. 197 .. | .. .. | 2 | 10 | 0 |
| „ Landolt's, in leather case .. | .. .. | 2 | 10 | 0 |
| „ Wecker's | 42s. and | 2 | 10 | 0 |

MISCELLANEOUS INSTRUMENTS.

| | £ | s. | d. |
|--|---|----|----|
| Aloes Bath, with 2 pans for boiling water, complete .. | 1 | 10 | 0 |

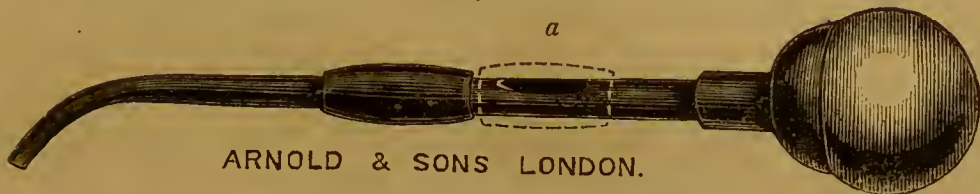


Fig. 198.

| | | | |
|---|---|---|---|
| Allman's Insufflator, for nasal gleet, catarrh, &c., Fig. 198 | 0 | 7 | 6 |
|---|---|---|---|

Vide "VETERINARY JOURNAL," APRIL, 1881.

'The operation is of the simplest character; about one drachm of P. Iodoformi Co. is placed in the 'Insufflator,' the instrument is then gently passed into the nose as high as it will conveniently go; the india-rubber ball is then pressed, when it will send the powder into the nose and its various cavities. This should be repeated night and morning. Simultaneously with its use, the nasal membrane may be occasionally washed out by means of a syringe with the sulphocarbolate of zinc, one scruple to the pint of tepid water: this syringing helps to clear out any decomposed matter that may hang about the turbinated bones.'

Copy of Letter received from Sir Paul Hunter:—

"Mortimer Hill, Mortimer, Berks.

"Sir Paul Hunter begs to inform Messrs. Arnold that the insufflator has been most useful, and that he has made a perfect cure of two horses suffering from nasal gleet by using the Iodoform Co., which horses Mr. D. Allman saw yesterday."

| | | | |
|--|---|----|---|
| American Nicking Knife, by Prof. Varnell | 0 | 4 | 6 |
| Anti-Crib Biting Apparatus, by Mr. Caleb Blackman, late Farrier-Major, 1st Life Guards | 0 | 18 | 0 |

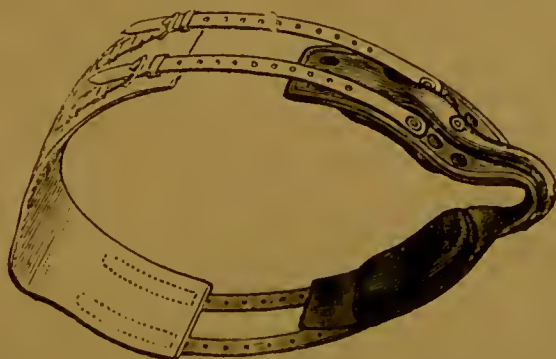


Fig. 199.

£ s. d.

| | | | |
|--|---|----|---|
| Anti-Crib Biting Apparatus, elastic, of gutta-percha, iron, and leather, constructed in such a manner that it cannot possibly injure the mane, a sure preventive against crib-biting, and will keep a crib-biter in good condition, Fig. 199 | 1 | 1 | 0 |
| „ „ A. and Sons' improved. | 1 | 10 | 0 |



Fig. 200.

| | | | | |
|---|---------|---|----|---|
| Apparatus for legs of horses, producing numerous and constant streams or jets of cold water (or hot for fomentation), supplies itself upon the syphon principle from a pail, manger, or tap of a cistern; it is fastened to the limbs by means of a strap and buckle Fig. 200 | .. | 0 | 15 | 0 |
| „ „ with regulating tap | .. | 0 | 18 | 0 |
| „ „ with reservoir and tap, complete | .. | 1 | 10 | 0 |
| „ for administering food or medicine in cases of tetanus | .. .. . | 1 | 10 | 0 |
| Artificial Eyes for Horses, &c. each | .. | 0 | 10 | 0 |
| Bird-stuffing Instruments, containing scissors, cutting nippers and pliers in one, forceps, scale-tang scalpel, 2 scalpels, curved scoop, narrow knife and curved scraper, in leather case, complete | .. .. . | 1 | 5 | 0 |

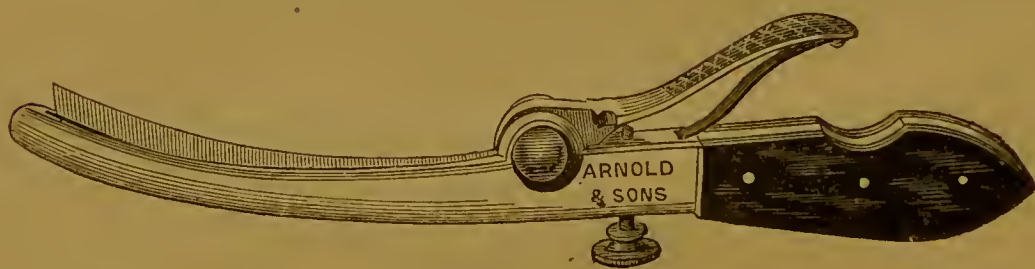


Fig. 201.

| | | | | |
|---|---------------------|---|----|---|
| Bistoury Cachée, Arnold & Sons', with regulating screw, to cut any required depth, Fig. 201 | .. .. . | 1 | 1 | 0 |
| „ for cows' teats | .. .. . | 0 | 15 | 0 |
| Blood Cans, graduated for six quarts | .. .. . | 0 | 4 | 0 |
| „ „ eight quarts | .. .. . | 0 | 5 | 6 |
| Blood Pins | per hundred | 0 | 1 | 0 |
| Boar and Tiger Hunting Knives | from | 0 | 15 | 6 |
| Bone Forceps, various | 5s. 6d. to | 0 | 12 | 6 |

| | £ | s. | d. |
|--|--------------|----|------|
| Boots, Hunting, etc., to be used temporarily in case of losing a shoe, will fit any size foot each | 0 | 18 | 0 |
| Boots for the Knees per pair | 12s. 6d. and | 0 | 16 0 |
| „ for Speedy Cuts 5s. 6d. and | 0 | 9 | 0 |
| „ for Strengthening 7s. 6d. and | 0 | 10 | 6 |
| „ for Poulticing Horses' Legs .. each | 15s. and | 1 | 1 0 |
| „ for Water 15s. and | 1 | 1 | 0 |
| „ to prevent Cutting under Arm | 0 | 12 | 0 |
| „ Ring for Cutting 2s. and | 0 | 2 | 6 |
| „ for Hock | | | |
| „ for Lawn use per set of four | 1 | 16 | 0 |
| „ for Fetlock, each:— | | | |
| 4-in. 6s., 4½-in. 6s. 6d., 5-in. 7s., 5½-in. 7s. 6d., 6-in. 8s., 6½-in. 9s., 7-in. 9s. 6d., 7½-in. 10s., 8-in. 10s. 6d. | | | |
| Botanical Instruments, in case complete | 0 | 18 | 0 |
| Bottles, Stoppered, of White Glass, for Surgery, W.M., 4 oz. 8s. 6d., 6 oz. 9s., 8 oz. 9s. 6d. per doz. | | | |
| Ditto, N.M., 4 oz. 6s. 9d., 6 oz. 7s. 6d., 8 oz. 8s. per doz. | | | |
| Ditto ditto, above 8 oz., stoppering included per lb. | 0 | 1 | 2 |
| Bottles, Stoppered, Glass, W.M., 1 oz. 4s. 6d., 2 oz. 5s. 9d., 3 oz. 6s. 6d., 4 oz. 7s., 6 oz. 8s. 6d., 8 oz. 9s., 12 oz. 10s. | | | |
| Ditto, N.M., 1 oz. 4s., 2 oz. 5s. 3d., 3 oz. 5s. 6d., 4 oz. 5s. 9d., 6 oz. 7s. 6d., 8 oz. 8s., 12 oz. 9s. | | | |
| Ditto, Pint, Quart, and 3 Pint per lb. | 0 | 0 | 10 |
| Bottles of Green Glass, for sending out Medicine, 3 oz. 12s. 6d., 4 oz. 14s., 10 oz. 19s., 12 oz. 20s., 14 oz. 23s. 16 oz. 23s. per gross. | | | |
| Boxes, Willow, ½ oz. 1s. 3d., 1 oz. 1s. 6d., 2 oz. 1s. 9d., 3 oz. 3s., 4 oz. 4s., 6 oz. 6s. per gross. | | | |
| Buffers | 0 | 2 | 6 |
| Bullet Forceps, plain pattern | 0 | 5 | 6 |
| „ Extractor | 0 | 12 | 0 |

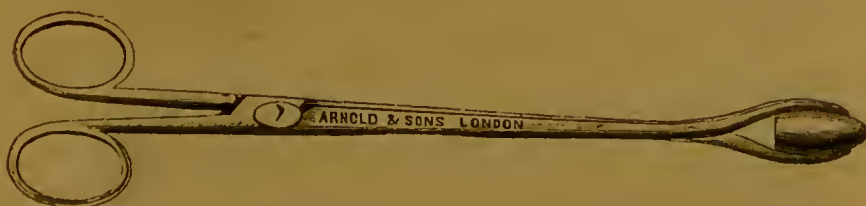


Fig. 202.

| | | | |
|---|---|----|---|
| Bullet Forceps, A. & Sons' improved, with Shifting Blades, Fig. 202 | 0 | 10 | 6 |
| Champagne Nippers 4s. 6d. and | 0 | 6 | 0 |
| Charlier Forest Stones, 6 in., mounted in case | 0 | 2 | 6 |



Fig. 203.

| | | | | | | | £ | s. | d. |
|--|----|----|----|----|----|----|---|----|----|
| Chloroform Cap (Gresswell's), Fig. 203 | .. | .. | .. | .. | .. | .. | 1 | 10 | 0 |
| Colt Muzzles .. | .. | .. | .. | .. | .. | .. | 0 | 0 | 6 |
| „ with spikes | .. | .. | .. | .. | .. | .. | 0 | 3 | 6 |
| Combs for mane | .. | .. | .. | .. | .. | .. | 0 | 1 | 0 |



Fig. 204.

Consultation Bag, A. and Sons' Registered, by Mr. Field,
No. 1, containing india-rubber clyster bag, horse catheter,

£ s. d.

| | | | |
|---|----|----|---|
| mare catheter, Evans' portable hammer, buffer and pincers united, brass quittor syringe, with small and large pipes, drawing knife, spatula, 4 whalebone probes, metal probe, 3 silver probes, scissors, suture wire twister, slide lancet, ophthalmoscope, pleximeter, stout and fine metallic suture wire, plated wire, twine needles, bandages, balling iron, tooth rasp and twitch, subcutaneous injection syringe, funnel, measure, spoons, clinical thermometer, 6 6-oz. each W. and N.M. stoppered bottles, complete | 15 | 15 | 0 |
| Empty Bag, Fig. 204. | 4 | 0 | 0 |
| Consultation Bag, A. and Sons' Registered, by Mr. Field, No. 2, containing 2 tins, 5 bottles, twitch, clyster bag, tow, tape bandage, measure, 2 W.M. stoppered bottles in case, 6 W.M. stoppered bottles in case, blinds, balling iron, horse catheter, tubular needle, wire twister, pocket-case, palette knife, quittor syringe, and pipette, complete | 10 | 10 | 0 |
| Empty Bag, Fig. 204 | 4 | 4 | 0 |
| Consultation Bag, by Prof. Axe, containing lactometer, urinometer, stethoscope, with screw plate, microscope, 2 clinical thermometers, case containing 2 each 1 drm., 2 drms., and $\frac{1}{2}$ oz. bottles, 4 oz. jar, ophthalmoscope, and probe-pointed scissors, complete | 10 | 0 | 0 |
| Cork Presser, of iron, bronzed | 0 | 2 | 6 |
| Cork, phials 8d., Daffy's 1s. and 1s. 6d., pints 2s. 6d., quarts | 0 | 3 | 6 |
| Corn Knives 3s. 6d. and | 0 | 4 | 6 |
| Corkscrews, various 1s. 6d., 2s. 6d., and | 0 | 3 | 6 |
| Cotton Wool per lb. | 0 | 2 | 6 |

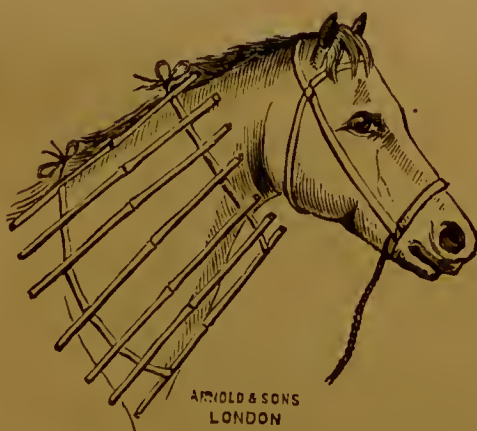


Fig. 205.

Cradles for the neck, bamboo, very light and strong, as recommended by Staff Veterinary Surgeon Partridge, Fig. 205 0 7 6

| | | | | | | £ | s. | d. |
|--|----|----|--------------|-------------|--|---|----|----|
| Cradles for the neck, 2 sizes | .. | .. | .. | each | | 0 | 4 | 0 |
| " " with leather straps, complete | .. | | | | | 0 | 12 | 6 |
| Cropping Clams | .. | .. | .. | .. | | 1 | 5 | 0 |
| Crib-Biting Muzzle | .. | .. | .. | .. | | 1 | 1 | 0 |
| Cupping Cups | .. | .. | .. | .. | | 0 | 2 | 0 |
| " " copper | .. | .. | .. | .. | | 0 | 4 | 6 |
| " " set of 6, with stopcocks and brass syringe | .. | | | | | 1 | 10 | 0 |
| Cutting Rings, for horses | .. | .. | .. | 3s. and | | 0 | 4 | 0 |
| Danish Vaccinating Instrument | .. | .. | .. | .. | | 0 | 10 | 0 |
| Deer-stalking Knives | .. | .. | .. | 8s. 6d. and | | 0 | 12 | 6 |
| Desk Knife | .. | .. | .. | .. | | 0 | 2 | 0 |
| Dog Nail Forceps | .. | .. | .. | .. | | 0 | 7 | 6 |
| Drainage Tubing | .. | .. | .. | per yard | | 0 | 1 | 6 |
| Dumb Reins, 2 springs | .. | .. | .. | per set | | 0 | 17 | 0 |
| " " without springs | .. | .. | .. | .. | | 0 | 13 | 0 |
| Embossing Presses | .. | .. | .. | from | | 0 | 16 | 0 |
| Evaporating Dishes, various sizes | .. | .. | from 2½d. to | | | 0 | 2 | 6 |
| Eye Instruments, complete in case | .. | .. | .. | | | 6 | 6 | 0 |
| Eye Knives, various | .. | .. | .. | each | | 0 | 7 | 6 |
| Eye Scissors | .. | .. | .. | " | | 0 | 7 | 6 |
| Eye Speculum (spring) for keeping eyelid open | .. | .. | .. | .. | | 0 | 6 | 0 |
| Filtering Paper | .. | .. | .. | per lb. | | 0 | 1 | 0 |



Fig. 206.

| | | | | | |
|---|----|----|---|---|---|
| Fomenting Pail, by Prof. Fearnley, Fig. 206 | .. | .. | 0 | 5 | 0 |
| Forceps for extracting thorns | .. | .. | 0 | 3 | 6 |

£ s. d.

Funnels in glass, 2 oz. 5d., 4 oz. 6d., 8 oz. 8d., 16 oz. 10d.,
32 oz. 1s. 3d.

„ in earthenware, 1 oz. 8d., 2 oz. 8d., 4 oz. 1s.,
8 oz. 1s. 4d., 16 oz. 2s., 32 oz. 2s. 6d., 48 oz. 3s. 6d.

„ in tin, 1 oz. 2d., 2 oz. 3d., 4 oz. 4d., 8 oz. 5d.,
16 oz. 8d., qrt. 9d., 3 pts. 11d.

Gallipots, cup-shape, $\frac{1}{2}$ oz. 4s., 1 oz. 5s., 2 oz. 6s., 3 oz. 7s. 6d.,
4 oz. 9s., 6 oz. 12s., 8 oz. 14s., 12 oz. 16s., 16 oz. 18s. per
gross.

| | | | | | | | |
|---|---|-----------------------------|----|-----------|---|----|---|
| „ | „ | nested, from 1 oz. to 4 oz. | .. | per gross | 0 | 8 | 0 |
| „ | „ | „ 1 oz. to 6 oz. | .. | „ | 0 | 10 | 0 |
| „ | „ | „ 1 oz. to 8 oz. | .. | „ | 0 | 12 | 0 |



Fig. 207.

Garden Pump and Fire Engine combined, Arnold & Sons',
Patent Simplex, with jet and rose complete, Fig. 207 .. 2 0 0

Prize Medals awarded by the Royal Horticultural Society, 1881 and 1882.

First-class Certificate Crystal Palace Flower Show, 1882.

It is the most simple, portable, and durable pump extant.

REPRINT FROM THE "IRONMONGER," APRIL 10TH, 1880.

"Messrs. Arnold and Sons, 35 and 36, West Smithfield, E.C., who are well known for their 'Simplex' enema injecting apparatus, have further developed the idea, and now produce a garden-pump worked on precisely the same principle as the instrument referred to, and differing from it only in dimensions and power. In application this article possesses the requirements of a garden-pump, the *modus operandi* being sufficiently indicated by the illustration; or, should the emergency occur, equally effective work may be performed by its aid in extinguishing fire in any ordinary apartment. Most other apparatus have either a packed piston or an india-rubber air-ball, and it is well known that the packing of pistons requires frequent attention, for if not constantly used and kept greased it dries and rots, and when required is absolutely useless. On the other hand, all india-rubber articles, however good, in time undergo some molecular change, and in the course of a few years, at most, become absolutely valueless. In hot climates especially, and in dry weather, these defects are apparent. These two serious drawbacks are entirely obviated in the 'Simplex,' and among the advantages claimed for it may be mentioned that it has no india-rubber air-chamber, the water itself, by an ingenious arrangement, forming its own packing. It is so effective that a continuous jet of water may be thrown to a considerable distance with the greatest ease. But what is more important is, that the 'Simplex' is always ready for immediate use, no matter how long it has lain by. Many of Messrs. Arnold's 'Simplex' enemas have been kept for years in India, and have been found in perfect working order when required."

| | £ | s. | d. |
|--|---|----|----|
| Garden Syringe, small, for Ferns | 0 | 7 | 6 |



Fig. 208.

| | | | |
|---|---|---|---|
| Garden Syringes, with 2 roses and 1 jet, complete, Fig. 208 | | | |
| 10s. 6d., 12s. 6d., and | 1 | 5 | 0 |
| Garden Shears, 12 inches | 0 | 9 | 0 |
| Gardener's Case, containing saw, shears, pruning and budding knives, complete | 2 | 2 | 0 |
| Glass Measures, conical or cylindrical, with feet, 60 drops | | | |
| 8d., 120 drops 9d., 1 oz. 8d., 2 oz. 9d., 3 oz. 1s., 4 oz. | | | |
| 1s. 2d., 6 oz. 1s. 8d., 8 oz. 2s., 16 oz. 3s., 20 oz. 3s. 3d., | | | |
| 32 oz. 3s. 6d., 40 oz. 4s. 6d. | | | |

| | | | £ | s. | d. |
|--------------------------|----|-----------|------------------------|----|-----|
| Glass Spirit Lamps.. | .. | .. | 1s. 6d., 1s. 9d., and | 0 | 2 6 |
| Gutta Percha Tissue | .. | .. | per yard | 0 | 2 0 |
| Hooks for Tumours | .. | .. | .. | 0 | 7 6 |
| Horn Scoops, for drawers | .. | per doz., | 5s., 6s., 7s. 6d., and | 0 | 8 6 |
| Horn Drinking Cup, small | .. | .. | .. | 0 | 2 0 |
| " " medium | .. | .. | .. | 0 | 2 6 |
| " " large | .. | .. | .. | 0 | 3 0 |
| Hound Brands | .. | .. | .. | | |

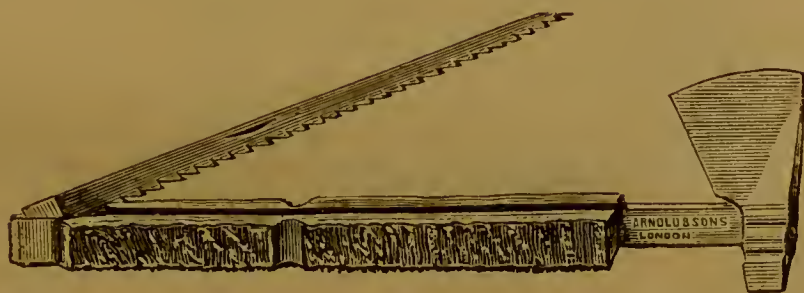


Fig. 209.

| | | | | | | |
|---|----|----|------------------|---|----|---|
| Hunting Hatchet, with saw, Fig. 209 | .. | .. | .. | 1 | 10 | 0 |
| " " and Hammer, in rosewood handles | .. | .. | .. | 1 | 1 | 0 |
| " " with pocket blade, in buckhorn | .. | .. | .. | 1 | 10 | 0 |
| " " with pocket-knife and saw | .. | .. | .. | 2 | 2 | 0 |
| " Knife for pocket, in buckhorn, 5 inches long, containing knife, fleam, tweezer, toothpick, and foot-pick | .. | .. | .. | 0 | 14 | 0 |
| India-rubber Knee Caps, with patent springs, very superior | | | from 12s. 6d. to | 0 | 15 | 0 |
| Jars, Ointment, for the surgery, every pattern, colour, and size, from 2 lbs. to 8 lbs. | | | | | | |
| Jockey Weighing Machine, with chair on tripod | .. | .. | .. | 8 | 8 | 0 |
| " Deal Platform Weighing Machine | .. | .. | .. | 4 | 5 | 0 |
| " " " with measuring rod | .. | .. | .. | 5 | 0 | 0 |
| Jointed Hook and Tenaculum | .. | .. | .. | 0 | 3 | 0 |
| Knives for Surgery | .. | .. | 1s. 9d. and | 0 | 2 | 3 |
| Labels for bottles and drawers, printed, 1½d., gold, 4d. each | | | | | | |
| Lenses to shut up, in horn and tortoiseshell, 1s., 2s., 3s., and | | | | 0 | 5 | 0 |
| " Coddington's | .. | .. | 2s. 6d. to | 0 | 10 | 0 |
| " Stanhope's | .. | .. | 3s. to | 0 | 10 | 0 |

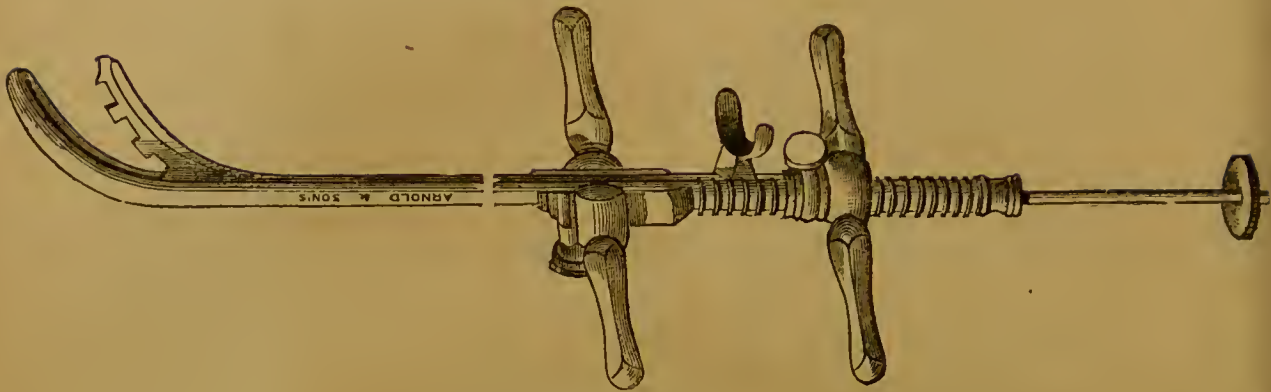


Fig. 210.

| | | | | £ | s. | d. |
|--------------------------------|----|----|----|----|----|----|
| Lithotrite, improved, Fig. 210 | .. | .. | .. | 7 | 7 | 0 |
| „ by Prof. Simonds | .. | .. | .. | 10 | 10 | 0 |

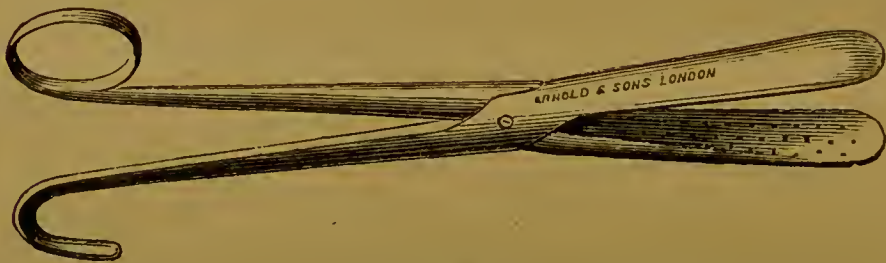


Fig. 211.

| | | | | | | |
|---|----|----|-------------|----|----|----|
| Lithotomy Forceps, Fig. 211 | .. | .. | £1 15s. and | 2 | 2 | 0 |
| „ Instruments, in mahogany case, complete | .. | .. | .. | 15 | 15 | 0 |
| „ Sounds | .. | .. | .. | 0 | 10 | 6 |
| „ „ whalebone | .. | .. | .. | 0 | 4 | 6 |
| Lunge Reins | .. | .. | .. | 0 | 8 | 0 |
| Mane Combs | .. | .. | .. | 0 | 1 | 0 |
| „ Pullers, improved | .. | .. | 4s. to | 0 | 7 | 6 |
| Martingale and Windsucker Appliance | .. | .. | .. | 2 | 2 | 0 |
| Marking Scissors | .. | .. | .. | 0 | 4 | 6 |
| „ „ with leather-covered bows | .. | .. | .. | 0 | 5 | 6 |
| Marks for cattle | .. | .. | .. | .. | .. | .. |
| Measures, in pewter, $\frac{1}{2}$ gill 1s., $\frac{1}{4}$ pint 1s. 3d., $\frac{1}{2}$ pint 1s. 9d., 1 pint 2s., 1 quart 3s. 9d. | .. | .. | .. | .. | .. | .. |
| Medicated Cotton (Prof. Morton's) | .. | .. | per lb. | 0 | 12 | 6 |

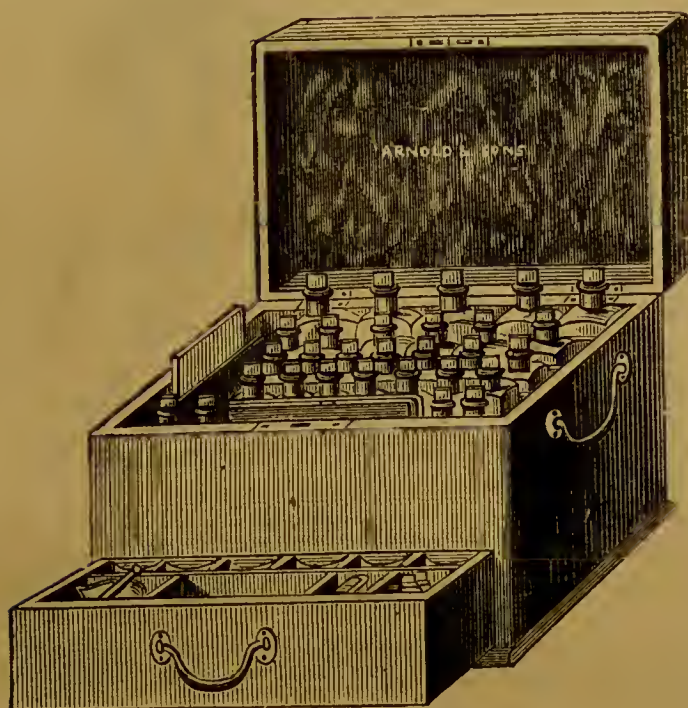


Fig. 212.

| | £ | s. | d. |
|--|---|----|----|
| Medicine Chest, A. and Sons' improved, oak, $14\frac{1}{2}$ in. long, $10\frac{3}{4}$ in. wide, 10 in. deep, containing 5 8-oz., 6 4-oz., 14 2-oz., 4 1-oz. green stoppered bottles, pill tile, 5 3-oz. pots, 3 1-oz. bottles, pestle and mortar, measure, scales, weights, and knife, with drawer, Fig. 212.. . . . | 3 | 3 | 0 |
| Ditto with white bottles, cut stoppers, in mahogany case | 3 | 10 | 0 |
| Medicine Chests for stables fitted to order | | | |
| „ Chest, oak, containing 8 16-oz., 4 2-oz. stoppered bottles, 13 tin boxes for ointment and balls, scales and weights, mortar, measure, and spatula | 4 | 4 | 0 |
| Nicking Knife, by Prof. Varnell, American pattern | 0 | 4 | 6 |
| „ „ in fixed ivory handle | 0 | 3 | 6 |
| „ „ in horn handle, spring back, for pocket-case | 0 | 4 | 6 |
| „ Pulleys per set of 3 | 0 | 7 | 6 |
| Oakum (picked) for dressing wounds per lb. | 0 | 1 | 6 |
| Oil Silk, 45 in. wide, non-adhesive per yard | 0 | 4 | 6 |
| Ointment Bath, with 2 pans for boiling water | 1 | 10 | 0 |
| „ Boxes, tin, as made for the Royal Veterinary College small per gross | 1 | 4 | 0 |
| „ „ „ „ „ large „ | 1 | 16 | 0 |
| „ Knives, bone | 0 | 1 | 0 |
| Overreach Boots (American pattern) each | 0 | 4 | 0 |

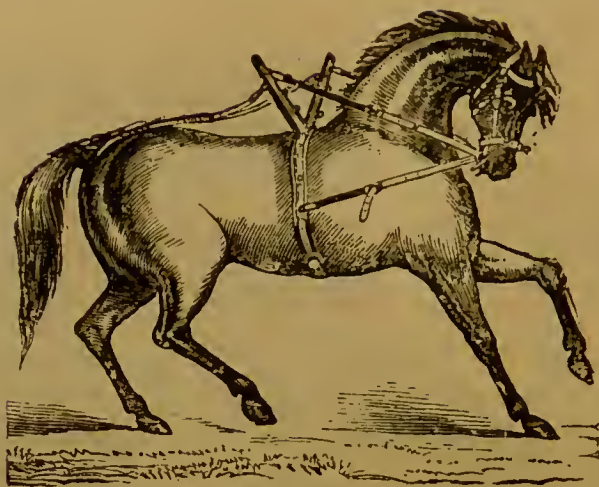


Fig. 213.

| | £ | s. | d. |
|---|---|----|----|
| Patent Whalebone and Gutta Percha Jockey, Fig. 213 .. | 3 | 10 | 0 |

For breaking horses, easy mouthed and temperate, or exercising in frost, in loose boxes, and on led horses, prevents falling and broken knees.

| | | | | |
|--|------------|---|----|---|
| Paper, demy, per ream | 7s. 6d. to | 0 | 14 | 0 |
| Periosteotomy Instruments, by Prof. Spooner, containing periosteotomy knife, nerving knife, seton needle, small curved bistoury, in leather case, complete | | 0 | 17 | 6 |



Fig. 214.

| | | | |
|---------------------------------------|---|---|---|
| Periosteotomy Knife, Fig. 214 | 0 | 4 | 6 |
|---------------------------------------|---|---|---|

Pestles and Mortars, iron (tinned inside), very strong,
 $\frac{1}{2}$ pt. 2s., pint 2s. 6d., quart 4s., 3 pt. 5s., 4 pt. 7s., 5 pt. 9s., 3 qt. 10s., 4 qt. 13s., 5 qt. 17s., 6 qt. 20s.

Wedgewood, composition, extra stout,
 2 oz. 1s.; 3 oz. 1s.; 4 oz. 1s. 4d.; 5 oz. 1s. 6d.;
 8 oz. 1s. 8d.; 12 oz. 2s.; 16 oz. 3s.; 22 oz. 3s. 6d.;
 26 oz. 4s.; 36 oz. 4s. 6d.; $2\frac{1}{2}$ pt. 6s.; 3 pts. 8s.;
 5 pts. 10s.; 6 pts. 12s.

| | | | |
|--|---|----|---|
| Pharmacy Chest for students, containing pestle and mortar, ointment slab, glass measure, palette knife, and scales and weights, complete | 0 | 12 | 6 |
|--|---|----|---|



Stethoscopes, various patterns, Figs. 215 to 222 £ s. d.
3s. to 0 5 0



Stomach Tube, with metal mounts, and Funnel for giving
horses and cattle draughts, Fig. 223 1 1 0

String per lb. 0 1 0
Sturdy Instruments for sheep, in case, complete 0 15 0
Tenotomy Knives, in fixed handles.. 0 3 6
Throat Forceps, for dogs, &c. 0 6 6

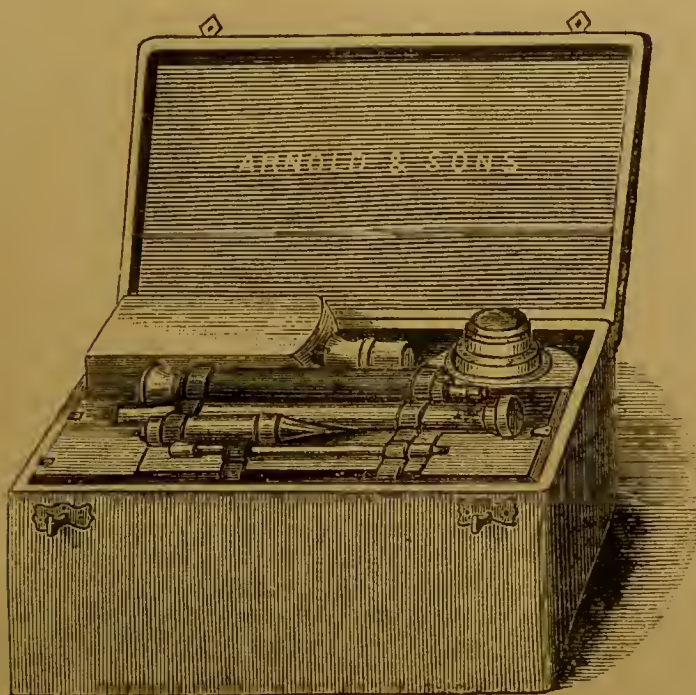


Fig. 224.

Thermo-Cautery, improved by Prof. Pritchard, with double platina instrument for firing, &c., complete in case, Fig. 224

£ s. d.

6 10 0

EXTRACT FROM "VETERINARY JOURNAL," FEBRUARY, 1880.

"Although Professor Pritchard recently brought this instrument before the notice of the Midland Counties Veterinary Medical Association, I think it may not be considered out of place to refer to this apparatus again, as the actual cautery is so frequently resorted to by veterinary surgeons. I should imagine that Professor Pritchard's description has scarcely been correctly reported. It is stated that the 'apparatus consisted of a spirit-lamp connected by india-rubber tubing with two india-rubber balls, &c.' Now, practically, these two india-rubber balls are required to propel air into the benzoline bottle, and if attached to the blowpipe fixed on the spirit-lamp, they require taking off and fixing on the benzoline bottle after the platinum point has been heated in the spirit-lamp flame; this is extremely inconvenient, for when I have tried to do it by myself I find I have to perch the point in the flame by some contrivance to keep it hot while I change the india-rubber pump from the spirit-lamp to the benzoline bottle. This is all unnecessary. My apparatus, which is the one Professor Pritchard borrowed to exhibit, has a small piece of india-rubber tubing for fitting to the spirit-lamp blowpipe, to be used with the mouth. That is unnecessary. I find myself that simply holding the end of the platinum in the still flame of the spirit-lamp, and not using the india-rubber ball pump till half a minute has elapsed, to be the quickest way of starting the process; for if air be propelled into the benzoline bottle while the point is held in the flame, it *will* require the heat of a blowpipe flame, for the platinum is rapidly cooled by the stream of cold air and benzoline vapour passing

through it. The apparatus and *modus operandi* are as follow:—Air is propelled by squeezing an india-rubber ball, having an ingress valve, into a second ball covered with netting to prevent over-distension; this latter acts as a reservoir and renders the stream constant. From the second ball an india-rubber tube is conducted to a bottle containing a very small quantity of benzoline. The stream of air is thrown upon the surface of the benzoline, and becomes mechanically charged with benzoline vapour; the mixed gases pass out of the benzoline bottle through another tube to the handle of the operating portion of the apparatus. This latter consists of a fine tube terminating in a platinum end of whatever shape desired; this tube is covered for two-fifths of its length by an ebony handle terminating in an ivory cup, and the remaining three-fifths by a brass tube which joins the ivory cup and platinum point, enclosing the fine tube entering the platinum point. In the brass tube are two perforations to give exit to the gases resulting from combustion. The operating point of platinum contains an intricate coil of platinum wire. The benzoline bottle is hung to the buttonhole, and the platinum point held in the still flame of the spirit-lamp for half a minute, the pumping is then commenced, and the mixed air and vapour are forced up to the heated platinum point. This causes a chemical union of the gases, with a number of minute explosions, modified by the intricate interior coil. The heat evolved at the chemical union increases that already existing, and so the process is carried on. If fluid benzoline be allowed to run up the tube to the point, its sudden evaporation at once cools it and leaves the end choked with carbon. In damp weather the apparatus is somewhat slower to start, and I find that on a wet day in a damp shed the benzoline requires oftener changing, for moist air makes it turbid, and a clear, bright heat cannot be well maintained. It is necessary to keep the apparatus in a warm place to keep the rubber parts in order.

“This form surpasses the old one by the rapidity of its action, the cooling effect the skin produces on the platinum is resisted by fresh heat; the rapidity is especially noticeable in puncturing, and if care is not exercised its rapidity may lead to mischief; it is easily used, from the smoothness of the platinum, which never wastes from heat. It requires no cleaning or rubbing while in use, as an extra squeeze of the pump burns off all adherent matter. It abolishes that cruel roasting process which is, from the *size* of the old iron, necessarily inflicted on the skin contiguous to the part destroyed by the cautery, and which, when lines are drawn close together, help to produce sloughing. *I have never had a case of sloughing after its application to the surface of the skin.* It is much less painful, as it is rapidly used and is of a clear heat, which is far less painful than a dull heat. It produces so little blemish that I think I could show about a dozen horses which require manual examination to find where it has been used. It is portable, always ready, and its value in castration is extreme as there is no necessity to get the animals near a house or a fire; more liberties can be taken with it than the old iron, as its cauterisation is more limited and more under control, and seems to exert a happy influence over the subsequent healing; and from the absence of a large amount of cicatricial tissue, the idea of the ‘permanent bandage’ produced, whether mythical or not, is more likely to exist in a greater degree. Whenever possible, I use the whole of the instrument myself. This is a little awkward at first, but is easily acquired, and frequently astonishes clients by the ease which practice soon gives the operator in manipulating it; assistants, as a rule, get immediately tired of the pumping unless they have much practice. Its cost is amply repaid by its superiority. These remarks, coming from one who was the first in this country to test practically the utility of the invention to our profession, will, I am sure, induce others to adopt a more scientific form of a useful remedy. I shall always consider mine as the cheapest instrument I ever bought.

“I am, sir, faithfully yours,

“London, December.

“CHARLES SHEATHER, M.R.C.V.S.”

| | £ | s. | d. |
|--|---|----|----|
| Tourniquet, by Mr. Field | 0 | 7 | 6 |
| Tow per lb., 6d. and | 0 | 0 | 8 |
| Trephines, for hydatids in sheep, &c., various | 0 | 10 | 0 |
| „ set of 3, fitting one handle, with brush, in leather case, complete | 1 | 12 | 6 |
| Twines per lb., 1s. to | 0 | 2 | 6 |
| „ Boxes $\frac{1}{4}$ lb. 1s. 6d., $\frac{1}{2}$ lb. | 0 | 3 | 0 |
| Umbilical Hernia Truss, A. and Sons' improved | 1 | 10 | 0 |
| Urinometer | 0 | 7 | 6 |
| „ glass with Trial glass | 0 | 7 | 6 |
| Weights, 7 lbs. to $\frac{1}{4}$ lb., iron | 0 | 7 | 6 |
| „ 14 lbs. „ „ | 0 | 11 | 6 |
| Windsucking and Crib-Biting Apparatus | 2 | 2 | 0 |
| „ Bit | 0 | 12 | 0 |
| Zinc Strainers $\frac{1}{2}$ pint 1s., 1 pint 1s. 6d., $1\frac{1}{2}$ pint | 0 | 2 | 0 |

MICROSCOPICAL INSTRUMENTS AND APPLIANCES.

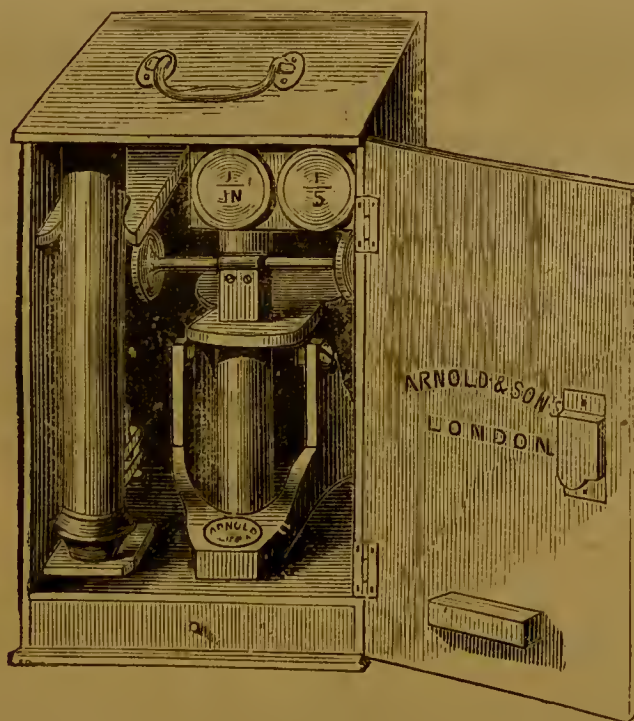


Fig 225.

| | | | |
|--|---|----|---|
| No. 1. Arnold and Sons' Student's Microscope, with rack adjustment, revolving diaphragm, bronzed stand, $\frac{1}{2}$ -inch and 1-inch object glasses, live box, and forceps, in cabinet, complete | 2 | 10 | 0 |
|--|---|----|---|

£ s. d.

No. 2. Arnold and Sons' Student's Microscope, with rack adjustment, revolving diaphragm, brass stand, $\frac{1}{4}$ -inch, $\frac{1}{2}$ -inch, and 1-inch object glasses, live box, dissecting forceps, with four objects, in mahogany cabinet, complete

3 3 0

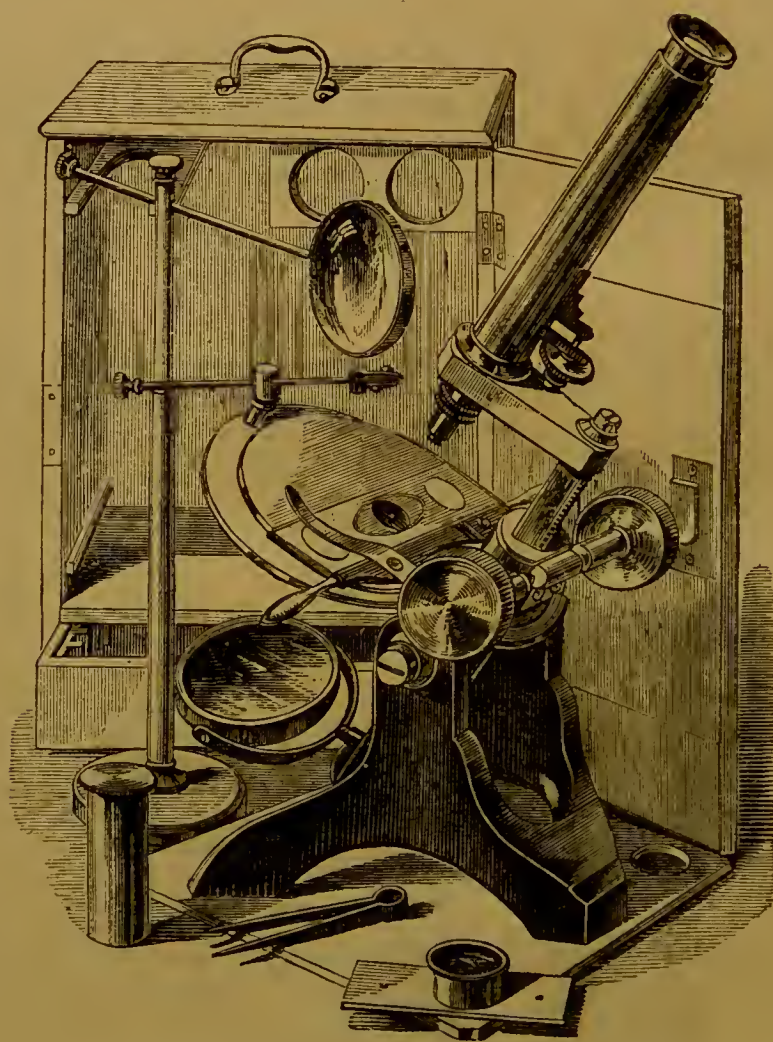


Fig. 226.

No. 4. Arnold and Sons' University Microscope, with coarse and fine adjustments, circular spring stage, revolving diaphragm, bronzed stand, $\frac{1}{4}$ -inch, $\frac{1}{2}$ -inch, and 1-inch object glasses, stand condenser, live box, stage forceps, dissecting forceps, in mahogany cabinet, complete, Fig. 226

5 5 0

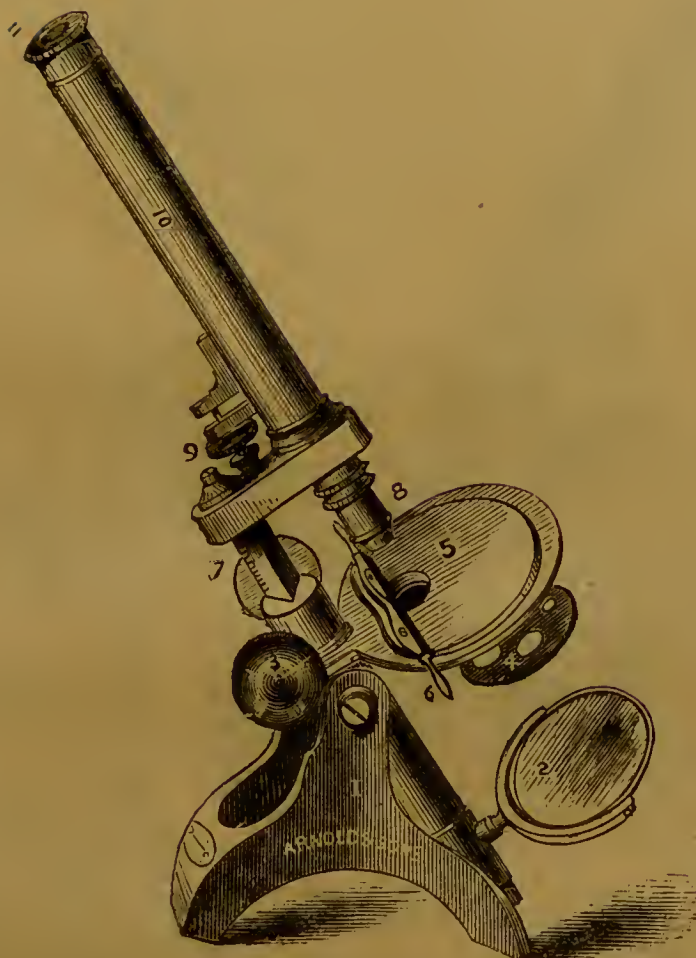


Fig. 227.

£ s. d.

No. 5. Professor Axe's Improved Microscope, with circular stage, by which means the object is easily and steadily moved in any direction, rackwork and fine adjustment, fitted with c eye-piece, and $\frac{1}{6}$ th and 1-inch best English achromatic objectives, complete, in mahogany cabinet, Fig. 227

5 5 0

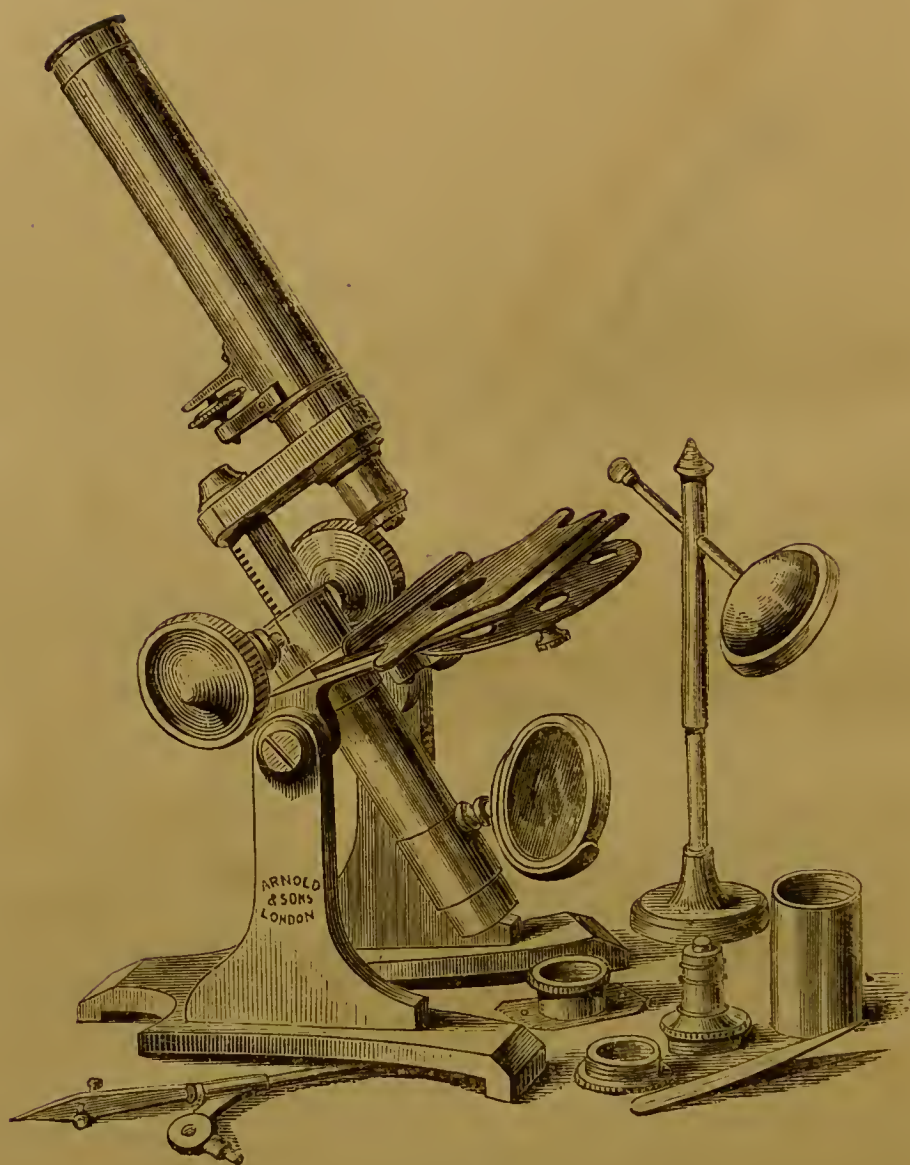


Fig. 228.

£ s. d.

No. 6. Arnold and Sons' Improved Microscope, with coarse and fine rackwork adjustments, brass stand, sliding spring stage, revolving diaphragm, B eye-piece, stand condenser, $\frac{1}{4}$ -inch, $\frac{1}{2}$ -inch, and 1-inch object glasses, live box, stage and dissecting forceps, with six objects, in mahogany cabinet, complete, Fig. 228

6 6 0

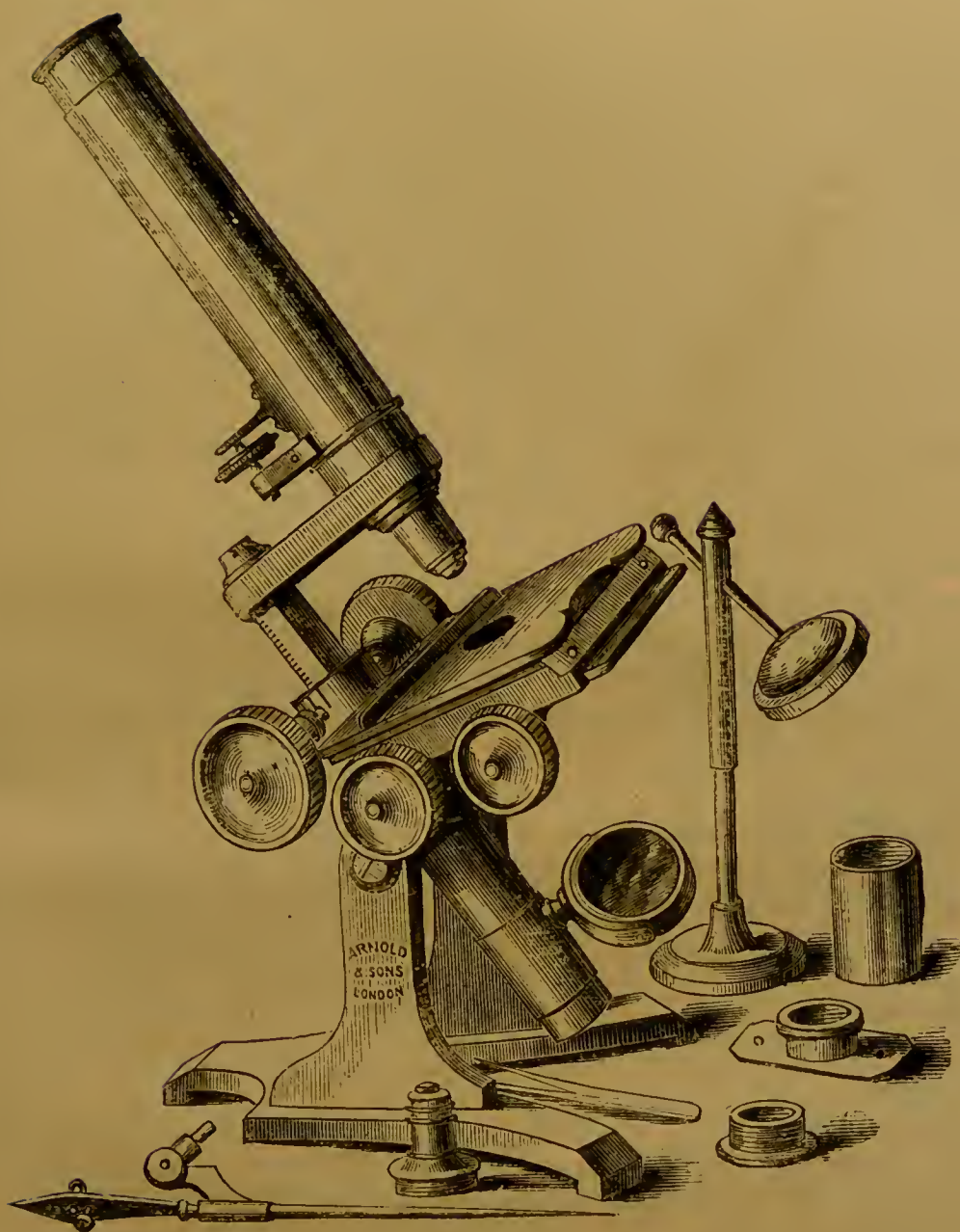


Fig. 229.

£ s. d.

No. 7. Arnold and Sons' Improved Microscope, with coarse and fine adjustments, solid brass stand, with rack and rotary stage, large mirror, revolving diaphragm, c eye-piece, $\frac{1}{4}$ -inch and 1-inch best achromatic object glasses, stand condenser, live box, stage and dissecting forceps, in mahogany cabinet, complete, Fig. 229 9 9 0

No. 8. Arnold and Sons' Improved Microscope, with coarse and fine adjustments, brass tube to body, double mechanical stage, large double mirror, revolving diaphragm, A and B eye-pieces, $\frac{1}{4}$ -inch, $\frac{1}{2}$ -inch, and 1-inch best achromatic object glasses, stand condenser, stage and dissecting forceps, live box, and spot lens, in mahogany cabinet, complete 14 14 0

£ s. d.

No. 9. Arnold and Sons' Improved Extra Superior Microscope, with every modern improvement, coarse and fine adjustments, draw tube to body, B and C eye-pieces, double mechanical stage, with clamping and revolving slide holder, large double mirror, with every adjustment, diaphragm, &c., $\frac{1}{4}$ -inch, $\frac{1}{2}$ -inch, and 1-inch object glasses, polarizing apparatus and selenite, large bull's-eye condenser on stand, stage and dissecting forceps, live box, and spot lens, complete, in mahogany cabinet 20 0 0

All the above Instruments are fitted with the Universal Screw for Object Glasses.

| | | | |
|---|---|----|---|
| Polarizing Apparatus | 1 | 5 | 0 |
| " " extra large prisms | 1 | 15 | 0 |
| Wenham's Parabolic Illuminator, with adjusting stop .. | 1 | 5 | 0 |
| Spotted Lens, for dark ground illumination .. 7s. 6d., | 0 | 12 | 0 |
| Stand Condenser 7s. 6d., 12s. 6d., | 0 | 15 | 0 |
| Live Box 2s. 6d., 3s. 6d., | 0 | 6 | 6 |
| Achromatic Spot Lens Condenser, with stops and fittings, complete, for resolving test objects | 2 | 2 | 0 |
| Mechanical Stage, fitted to any microscope, £1 10s., £2 10s., | 3 | 0 | 0 |
| Eye-pieces 7s. 6d., 10s. 6d., | 0 | 12 | 6 |
| Stage Forceps 5s. 6d., | 0 | 7 | 6 |
| " Micrometer | 0 | 4 | 6 |
| Eye-piece 6s., | 0 | 8 | 6 |
| Camera Lucida 5s., | 0 | 10 | 0 |
| Glass Plates 1s., | 0 | 1 | 6 |
| Microscopic Syringe, with stopcock and three pipes, in case | 1 | 1 | 0 |
| Frog Plates 7s., | 0 | 10 | 6 |
| Glass Slides, hollow | 0 | 0 | 6 |
| Hand Magnifiers, for dissecting from | 0 | 1 | 0 |
| Turn-Tables 4s. 6d., | 0 | 6 | 6 |
| Silver Parabolic Reflector, on stand, with ball-and-socket joint | 0 | 12 | 6 |
| Canada Balsam per bottle | 0 | 1 | 0 |
| Marine Glue " | 0 | 1 | 0 |
| Gold Size " | 0 | 1 | 0 |
| Glycerine " | 0 | 1 | 0 |
| Glass Slips, 3 × 1, unground per dozen | 0 | 0 | 4 |
| " ground " | 0 | 0 | 6 |
| Folding Book Cases for six dozen slides to lay flat .. | 0 | 5 | 6 |
| Opalised Glass Stage Plates | 0 | 0 | 6 |

| | | | £ | s. | d. |
|--|----|------------------|---|----|----|
| Object Boxes for one or two dozen.. | .. | .. | 0 | 1 | 0 |
| „ new six-tray, for three dozen | .. | .. | 0 | 3 | 6 |
| Animalcule Cages .. | .. | .. 6s. 6d., | 0 | 12 | 0 |
| „ Tubes, set of, in case .. | .. | .. 2s., | 0 | 5 | 0 |
| Thin Glass Squares or Circles, various sizes | .. | .. per box | 0 | 1 | 0 |
| Labels .. | .. | .. „ | 0 | 0 | 3 |
| Watch Glasses .. | .. | .. per doz. | 0 | 2 | 0 |
| Section-Lifters .. | .. | .. 6d., 9d., and | 0 | 2 | 0 |



Fig. 230.

| | | | | | | | |
|---------------------------------|----|----|----|----|---|---|---|
| Scissors, Microscopic, Fig. 230 | .. | .. | .. | .. | 0 | 4 | 6 |
|---------------------------------|----|----|----|----|---|---|---|



Fig. 231.

| | | | | | | | |
|--------------------------------|----|----|----|----|---|---|---|
| Forceps, Microscopic, Fig. 231 | .. | .. | .. | .. | 0 | 2 | 0 |
|--------------------------------|----|----|----|----|---|---|---|



Fig. 232.

| | | | | | | | |
|--------------------------------|----|----|----|----|---|---|---|
| Scalpel, Microscopic, Fig. 232 | .. | .. | .. | .. | 0 | 2 | 0 |
|--------------------------------|----|----|----|----|---|---|---|



Fig. 233.

| | | | | | £ | s. | d. |
|-------------------------------|----|----|----|----|---|----|----|
| Needle, Microscopic, Fig. 233 | .. | .. | .. | .. | 0 | 0 | 2 |

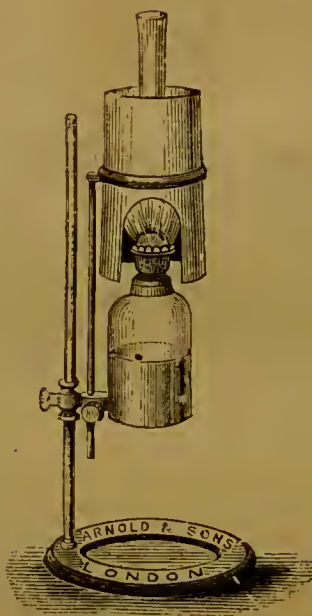


Fig. 234.

Microscopic Lamp, Arnold and Sons' improved, Fig. 234

12s. 6d. and 0 15 0

The above is fitted with Hailes's porcelain shade, and has all necessary adjustments; the glass reservoir is protected by a brass case, from which it can be readily removed, and in which it rotates, so that either the edge or flat side of the flame can be turned towards the opening in the shade. The shade can be adjusted to its proper height in relation to the flame, and clamped in that position by means of the screw facing the observer; the whole can then be moved up or down upon the pillar and clamped at the required height by the screw to the left of cut, without deranging the adjustment of the shade. The lamp mount is hinged so that the gallery, &c., may be turned back to facilitate the cutting and trimming of the wick.

ENGLISH ACHROMATIC OBJECT GLASSES.

BEST QUALITY.

THESE ARE GUARANTEED.



Fig. 235.

| Object-glasses. | Angular aperture. | Magnifying powers with the various eye-pieces. | | | | | | Price. | | |
|-----------------|-------------------|--|------|------|------|------|-------|--------|----|----|
| | | A | B | C | D | E | F | | | |
| 5 inches | 7 degs. | 8 | 13 | 24 | 36 | 52 | 72 | £ | s. | d. |
| 4 " | 9 " | 10 | 16 | 30 | 45 | 65 | 90 | 1 | 10 | 0 |
| 3 " | 12 " | 13 | 20 | 35 | 56 | 84 | 112 | 3 | 0 | 0 |
| 2 " | 15 " | 20 | 32 | 55 | 90 | 135 | 180 | 3 | 0 | 0 |
| 1½ " | 20 " | 25 | 40 | 70 | 112 | 168 | 224 | 3 | 0 | 0 |
| 1 " | 15 " | 37 | 60 | 105 | 170 | 255 | 340 | 2 | 0 | 0 |
| 1 " | 25 " | 37 | 60 | 105 | 170 | 255 | 340 | 3 | 10 | 0 |
| ⅔ " | 35 " | 60 | 100 | 145 | 270 | 405 | 540 | 3 | 10 | 0 |
| ½ " | 90 " | 95 | 150 | 265 | 420 | 630 | 840 | 4 | 4 | 0 |
| ⅓ " | 95 " | 150 | 250 | 400 | 700 | 1000 | 1400 | 4 | 10 | 0 |
| ⅓ " | 100 " | 270 | 425 | 630 | 1200 | 1600 | 2200 | 5 | 5 | 0 |
| ⅓ " | 120 " | 270 | 425 | 630 | 1200 | 1600 | 2200 | 5 | 5 | 0 |
| ⅓ " | 140 " | 550 | 840 | 1300 | 2400 | 3200 | 4400 | 7 | 7 | 0 |
| ⅓ " | 170 " | 900 | 1500 | 2200 | 3600 | 5400 | 6400 | 10 | 10 | 0 |
| ⅓ " | 170 " | 1300 | 2000 | 3000 | 5700 | 7600 | 10300 | 21 | 0 | 0 |

| | | | | | | |
|--|---------|---|---|---|----|----|
| | | | | £ | s. | d. |
| Object-glasses of foreign manufacture, best quality, | ¼-in... | | | 1 | 1 | 0 |
| " | " | " | " | 1 | 0 | 0 |
| | ½-in... | | | | | |

MICROSCOPIC OBJECTS,

Of the highest attainable perfection, comprising every branch of microscopy, anatomy, physiology, morbid tissues, toxicology, materia medica, botany, entomology, geology, mineralogy, &c. Some first-class preparations selected from the productions of Moller, Bourgogne, Rodig, and other foreign artists, with valuable accessions from the stock and materials of the late C. M. Topping. From the above, selections may be made in any of the departments composed of 12, 24, or 36 slides or more (the prices of the majority being 1s. 6d. each), for the use of professors, teachers, and students, as well as typical illustrations of acute and chronic diseases for the use of physicians and surgeons, of which the following is a synopsis:—

| | £ | s. | d. |
|---|---|----|----|
| A set of Slides (12) illustrating the growth and structure of human bone, in case | 1 | 4 | 0 |
| Ditto ditto urinary deposits, consisting of specimens of oxalate of lime, lithic acid, dumb-bell lithic acid, dumb-bell oxalate of lime, carbonate of lime, spermatozoa, cystic oxide, phosphates, hippuric acid, urea, urate of soda, purpurate of ammonia | 1 | 1 | 0 |
| 12 to 72 Slides illustrating human anatomy and physiology, each | 0 | 2 | 0 |
| 12 to 36 „ „ that of the lower animals „ | 0 | 2 | 0 |
| 12 to 72 „ „ morbid tissues in acute and chronic disease | 0 | 2 | 0 |
| 12 to 36 Urinary Deposits in acute and chronic disease | 0 | 1 | 6 |
| 12 to 36 Blood Discs, Spermatozoa, Pigment Cells, &c. | 0 | 1 | 6 |
| 12 to 24 Entozoa, Epizoa, &c. | 0 | 1 | 6 |
| 18 Beautiful Preparations, sections of the human eye series | 2 | 5 | 0 |
| 12 Slides illustrating the development and growth of human bone | 1 | 4 | 0 |
| 12 to 48 Hair, Bone, Teeth, Shell, Spine, Scales, &c. | 0 | 1 | 6 |
| 12 to 36 Slides, Toxicology and the Materia Medica 1s. 6d. and | 0 | 2 | 0 |
| 12 to 36 Test Objects for Lower and Highest Achromatic Objectors, Moller's Typen Platte, 400 Diatoms and Catalogue | 4 | 0 | 0 |
| Ditto 100 Diatoms and Catalogue £1 5s. and | 1 | 10 | 0 |
| Ditto Test Plattes, 20 Diatoms, mounted dry | 1 | 0 | 0 |
| Ditto, ditto mounted in Balsam | 0 | 14 | 0 |
| Wheeler's ditto 60 Foraminifera and Catalogue | 1 | 1 | 0 |

| | £ | s. | d. |
|--|---|----|----|
| Webb's Micro-writing on Glass and Test Lines ruled after Nobert 1s. 6d. to | 5 | 0 | 0 |
| Dalton's Artistic Groups of Flowers, Butterflies, Birds 5s. to | 2 | 0 | 0 |
| 12 to 72 Slides, a Series on the Organic Structure of Plants each | 0 | 1 | 6 |
| 12 to 96 Slides of Recent and Fossil Diatomaceæ „ | 0 | 1 | 6 |
| 12 to 108 Micro-Photographs „ | 0 | 1 | 0 |

*Every preparation from the animal, vegetable, or mineral kingdoms,
for the microscope, supplied to order.*

GALVANIC BATTERIES, ETC.

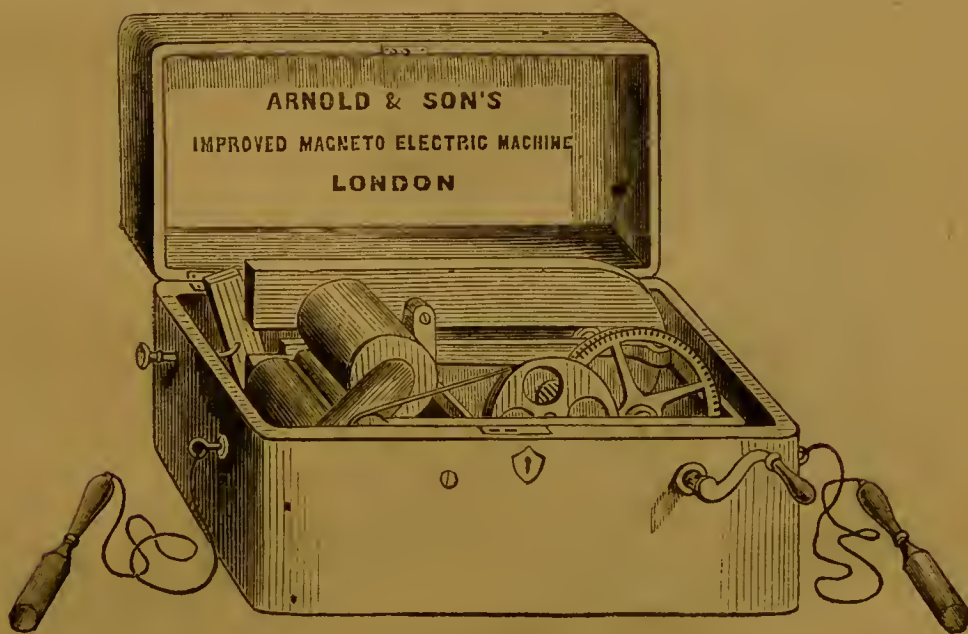


Fig. 236.

| | | | |
|--|---|----|---|
| Electro-Magneto Machine, in mahogany case, very powerful, Fig. 236 | 1 | 10 | 0 |
| " " Arnold and Sons' Improved, with all modern improvements, in mahogany case, very powerful | 1 | 15 | 0 |

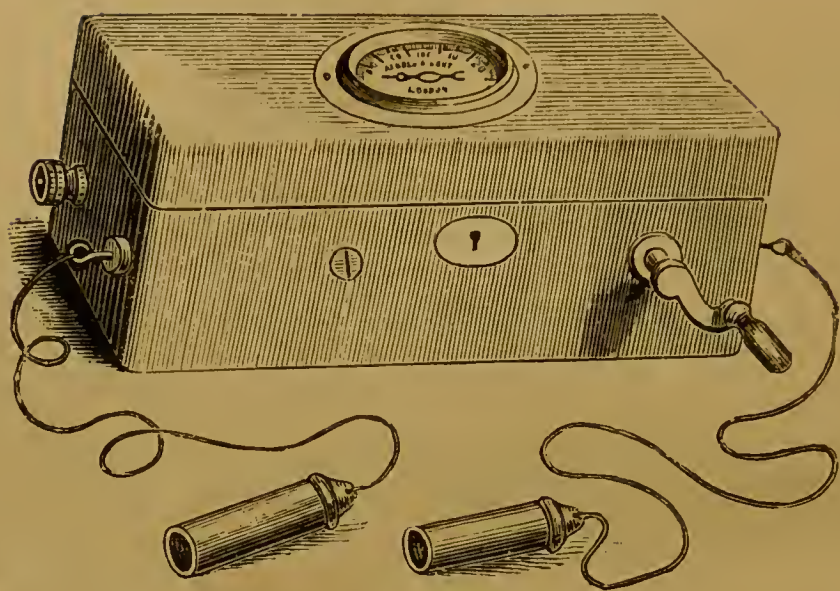


Fig. 237.

£ s. d.

Arnold and Sons' Electro-Magneto Machine, with improved magnetic dial indicator, Fig. 237 2 2 0

By means of a regulating dial on the top of the cabinet, the operator is enabled to gradually increase or decrease the power of the battery as required, the strength of the current being recorded on the dial.

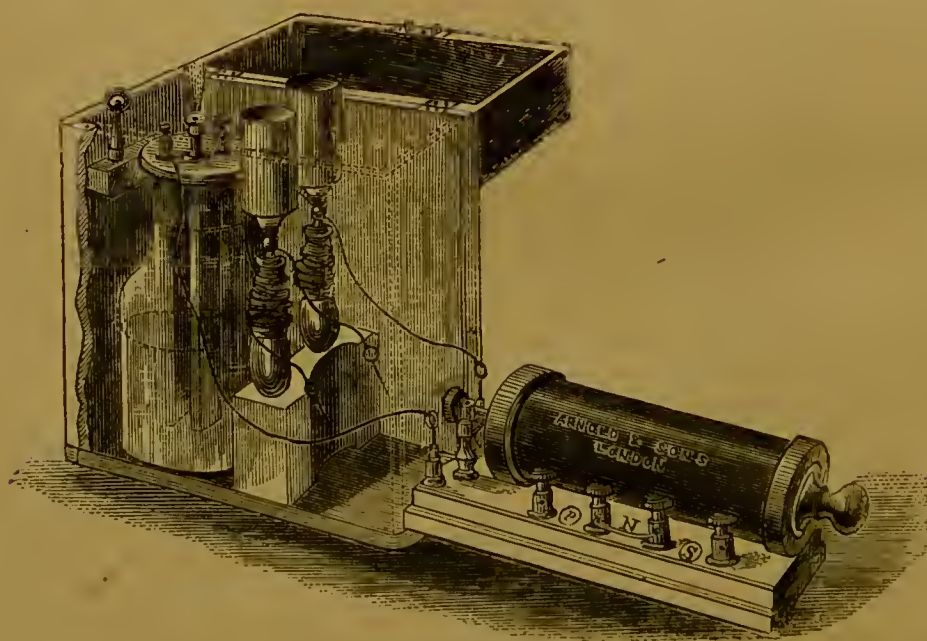


Fig. 238.

Arnold and Sons' Improved Portable Bichromate Battery, Fig. 238 4 4 0

By a simple mechanical arrangement the zinc plate can at once be withdrawn from the solution, and the action is thereby suspended. It can be left for any time without exhausting the plates; when required for use again, by simply letting down the zinc plate the action is immediately resumed. The current is easily regulated and almost continuous. The solution will last a length of time, is inexpensive, and can be renewed without trouble.

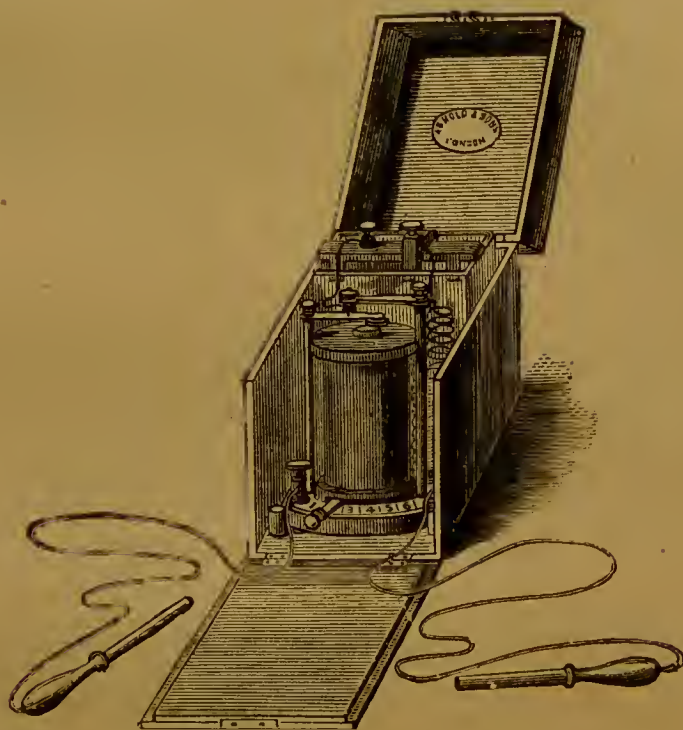


Fig. 239.

| | £ | s. | d |
|--|---|----|---|
| Arnold and Sons' Portable Battery, with glass cell and improved regulating gauge, complete, in mahogany case, very portable and powerful, Fig. 239 | 4 | 0 | 0 |

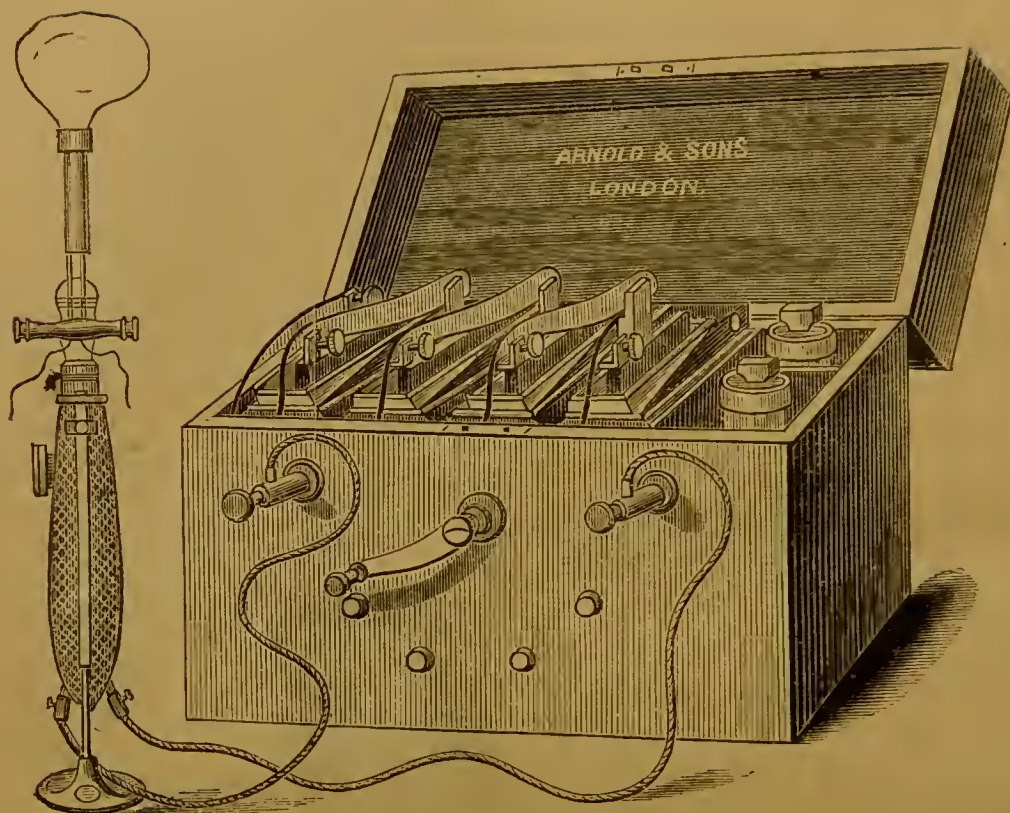


Fig. 240.

Fig. 241.

| | £ | s. | d. |
|--|---|----|----|
| Galvanic Cautery Battery, Arnold and Sons' Improved, in box, complete (without Ecraseur), Fig. 241 | 8 | 8 | 0 |
| Galvanic Ecraseur, with curved and straight ends, platinum wire, &c., complete, in morocco case, Fig. 240 .. | 4 | 4 | 0 |

ENTOMOLOGICAL INSTRUMENTS.

| | | | |
|--|---|----|---|
| No. 1. Case, containing four fine knives in ivory handles, various patterns, and spring forceps | 0 | 10 | 6 |
| No. 2. Leather Case, containing five fine knives in ivory handles, various patterns, pair scissors, and spring forceps | 0 | 16 | 0 |
| No. 3. Superior Morocco-leather Case, containing five knives in ivory handles, various patterns, improved scissors, spring forceps, and two fine hooks | 1 | 0 | 0 |

| | | | £ | s. | d. |
|---|----|---------|---|----|----|
| Entomological Forceps, various patterns | .. | .. each | 0 | 3 | 6 |
| „ Knives | „ | .. „ | 0 | 2 | 0 |
| „ Hooks | „ | .. „ | 0 | 2 | 0 |
| Valentin's Section Knife | .. | .. .. | 0 | 13 | 0 |
| „ „ complete in case | .. | .. .. | 0 | 17 | 6 |



Fig. 242.

| | | | |
|--|---|----|---|
| Arnold and Sons' Improved Section Knife, Fig. 242.. | 0 | 15 | 0 |
| „ „ in case .. | 0 | 18 | 6 |
| Johnson's Improved Section Knife, in case, complete .. | 0 | 12 | 6 |

VETERINARY PUBLICATIONS.

| | | | |
|---|---|----|---|
| Armatage's Every Man his own Horse Doctor, in which is embodied Blaine's Veterinary Art, numerous recipes, coloured plates and engravings 1877 | 1 | 1 | 0 |
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| Cobbold on Worms, Lectures on Practical Helminthology 1872 | 0 | 5 | 0 |
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| Fleming's Manual of Veterinary Sanitary Science and Police, embracing the Nature, Causes, Symptoms, &c., and the Prevention, Suppression, Therapeutic Treatment, and Relations to the Public Health of the Epizootic and Contagious Diseases of the Domesticated Animals, &c., 2 vols. 1875 | 1 | 16 | 0 |
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TABLE KNIVES, RAZORS, ETC.

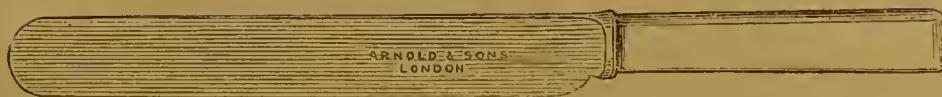


Fig. 243.

| | £ | s. | d. |
|---|---|----|----|
| Table Knives, Arnold and Sons' superior, in best ivory handles, Fig. 243 per doz. | 2 | 10 | 0. |



Fig. 244.

| | | | | |
|--|----------------|---|----|---|
| Dessert Knives, Arnold and Sons' superior, in best ivory handles, Fig. 244 | per doz. | 2 | 0 | 0 |
| Carving Knife and Fork, Arnold and Sons' superior, in best ivory handles | per pair | 0 | 15 | 0 |
| Poultry Carvers | ditto | 0 | 14 | 0 |
| Table Knives, in ivory handles | „ | 1 | 10 | 0 |
| Dessert „ | „ | 1 | 6 | 0 |
| Carving Knife and Fork, in ivory handles | per pair | 0 | 10 | 6 |
| Poultry Carvers | „ | 0 | 10 | 6 |
| Table Knives, in ivory handles, plain quality | per doz. | 1 | 5 | 0 |
| Dessert „ | „ | 1 | 1 | 0 |
| Carving Knife and Fork „ | per pair | 0 | 9 | 0 |
| Poultry Carvers | „ | 0 | 9 | 0 |
| Table Knives and Forks, in bone handles | per doz. | 0 | 12 | 0 |
| Dessert „ | „ | 0 | 10 | 6 |
| Carver and Fork | per pair | 0 | 5 | 0 |
| Table Knives, in black handles, with silver ferrules | „ | 1 | 1 | 0 |
| Dessert „ | „ | 0 | 18 | 0 |
| Table Forks, stoutly electro-plated | per doz. 42s., | 2 | 10 | 6 |
| Dessert Forks „ | „ 32s., | 2 | 0 | 0 |
| Table Spoons „ | „ 40s., | 2 | 8 | 0 |
| Dessert „ | „ 30s., | 1 | 16 | 0 |
| Tea „ | „ 18s., | 1 | 4 | 0 |

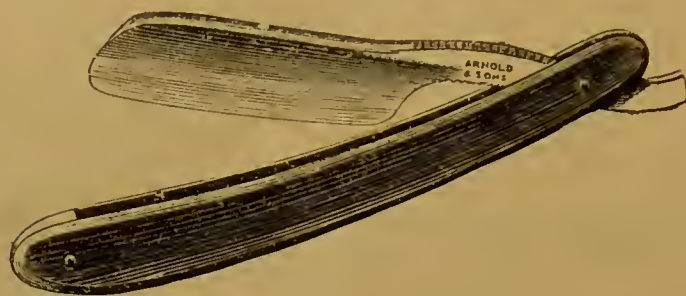


Fig. 245.

| | | | £ | s. | d. |
|------------------------------------|----|----|----------|----|------|
| Razors, in plain handles, Fig. 245 | .. | .. | per pair | 0 | 2 0 |
| „ good quality, black handles | .. | .. | „ | 0 | 5 0 |
| „ best „ „ | .. | .. | „ | 0 | 7 0 |
| „ good quality, ivory handles | .. | .. | „ | 0 | 9 0 |
| „ best „ „ | .. | .. | „ | 0 | 10 6 |
| „ very superior „ „ | .. | .. | „ | 0 | 12 0 |
| „ „ „ in tortoiseshell | .. | .. | „ | 0 | 14 0 |
| Heffor's Razors, hollow ground | .. | .. | each | 0 | 2 6 |

In an article on "Methods of Obtaining Sections of Frogs' Eggs," the writer states:—"I find the best razor for this purpose, and, indeed, *for all microscopic purposes*, to be the flexible-edged razors made by John Heffor, Sheffield, and stamped 'Made for the Army.' In order to render the edge flexible, these razors have their surfaces ground hollow; this hollow holds a great deal of spirit, and thus renders it easier to float the sections off. Moreover, the edge is extremely thin, and does not act as a wedge on a brittle substance like a frog's egg, and break the section in half. . . . Again, these *razors are extremely easy to sharpen*, and every microscopist ought to be able to put a fine edge on his own razor. . . ."

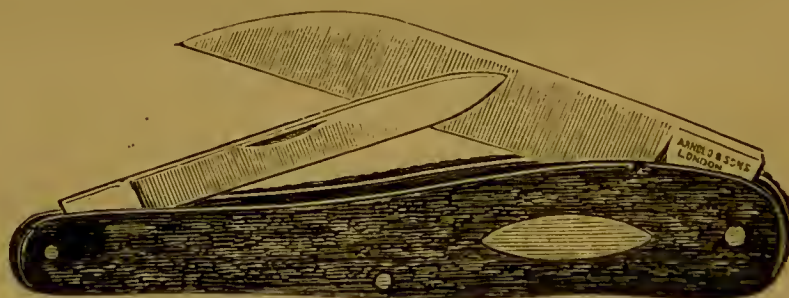


Fig. 246.

| | | | | | | | |
|---|----|----|----|-------------------|---|---|---|
| Pocket Knives, 1 blade, in buck, ivory, pearl, and tortoise-shell | .. | .. | .. | 1s., 2s. 6d., | 0 | 3 | 6 |
| „ 2 blades ditto Fig. 246, | .. | .. | .. | 1s. 6d., 3s. 6d., | 0 | 5 | 0 |
| „ 3 blades ditto | .. | .. | .. | 2s., 5s., | 0 | 7 | 6 |
| Sportsman's Knives in great variety | .. | .. | .. | 10s. 6d. to | 5 | 0 | 0 |



Fig. 247.

| | | | £ | s. | d. |
|---|----|----------|---|----|----|
| Ladies' Scissors, embroidery, Fig. 247 .. | .. | 3s. 6d., | 0 | 5 | 0 |
| „ button-hole .. | .. | 3s. 6d., | 0 | 5 | 0 |



Fig. 248.

| | | | | | | |
|---|----------|------|----------|---|---|---|
| Ladies' Scissors, cutting out, Fig. 248 | 3s. 6d., | 4s., | 4s. 6d., | 0 | 5 | 0 |
|---|----------|------|----------|---|---|---|

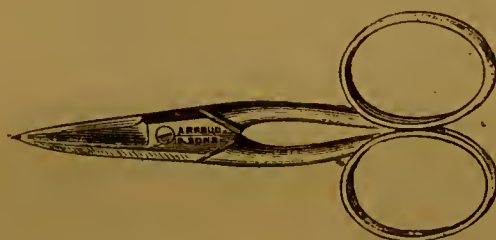


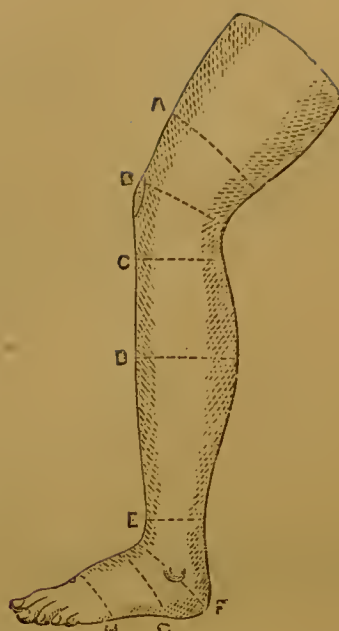
Fig. 249.

| | | | | | | | |
|---|----|----|----|----------|---|----|---|
| Nail Scissors, Fig. 249 .. | .. | .. | .. | 3s. 6d., | 0 | 4 | 6 |
| „ curved .. | .. | .. | .. | .. | 0 | 4 | 6 |
| Nail Nippers .. | .. | .. | .. | .. | 0 | 5 | 0 |
| Hunting Hatchets .. | .. | .. | .. | .. | 1 | 1 | 0 |
| Hunting Hatchet and Saw, in spring-back buckhorn handle | .. | .. | .. | .. | 1 | 10 | 0 |
| Boar and Tiger Hunting Knives .. | .. | .. | .. | each | 1 | 1 | 0 |
| Corn Knife (Springback) .. | .. | .. | .. | .. | 0 | 3 | 6 |
| „ „ Improved, 2 blades .. | .. | .. | .. | .. | 0 | 4 | 6 |
| „ „ in leather case .. | .. | .. | .. | .. | 0 | 3 | 0 |



Cotton Elastic
Stockings,
5/ and 7/ each.

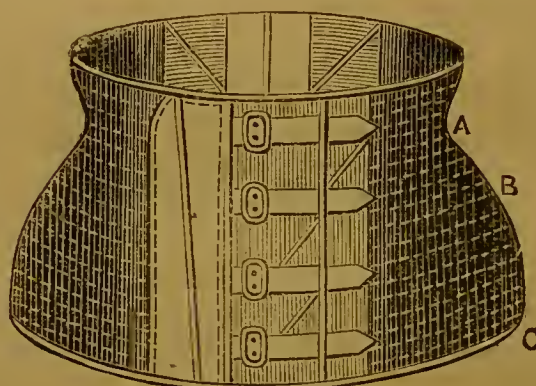
Silk Elastic
Stockings,
10/ and 12/6 each.



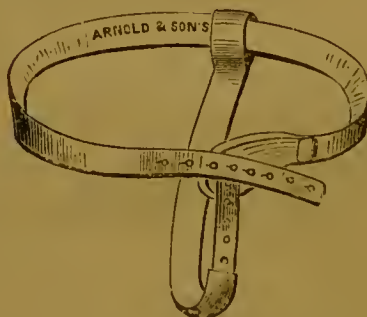
Cotton Elastic
Knee Caps,
4/ and 5/ each.

Silk Elastic
Knee Caps,
8/ and 10/ each.

Measurements required for Stockings—Circumference at C, D, E, F, G, H, and length from C to G.



Riding Belts, 10/6 15/ 21/ 30/ and 42/ each.
Ladies' „ 15/ 21/ 30/ and 42/ each.



Single Trusses, 7/6 10/6 15/ and 21/ each.

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Suspensory Bandages, 2/6 3/6 and 5/ „

Artificial Legs, £10 10s. to £20.

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Artificial Arm,
with Hand
attached, £10 10/
£15 15/ & £20.

Artificial Socket
Arms, for
amputation above
elbow, fitted with
Ring, Hook, Knife,
or Fork, 42/ and
63/.



Artificial Socket
Arm, for
amputation below
elbow, 42/ & 63/.

Artificial Eyes, 20/ and 30/ each.

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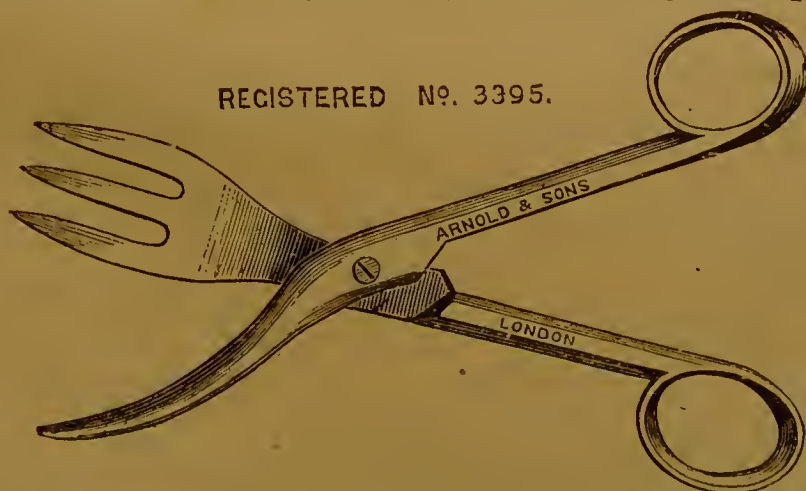
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The following Testimonials have been received, which, A. and Sons trust, is sufficient proof and guarantee of the quality of all Instruments manufactured and sold by them :—

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14th December, 1871.

We hereby certify that Messrs. Arnold and Sons have supplied this Institution with Veterinary Instruments to the satisfaction of the officers for a period of not less than twenty-five years.

(Signed) JAS. B. SIMONDS.
WILLIAM PRITCHARD.

From the PRESIDENT OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

35, NORFOLK STREET, SHEFFIELD.

14th March, 1872.

I have for many years been in the habit of using instruments made by Messrs. Arnold and Sons, and I have pleasure in stating that they have been entirely satisfactory.

(Signed) B. CARTLEDGE.

From the PRESIDENT OF THE CENTRAL VETERINARY MEDICAL SOCIETY.

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Yours very obediently,
(Signed) G. FLEMING,
Royal Engineers.

From the late PRINCIPAL OF THE ROYAL VETERINARY COLLEGE.

ROYAL VETERINARY COLLEGE.

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I certify that I have carefully examined the instruments produced to me by Messrs. Arnold and Sons, and I have no hesitation in expressing my marked approval of them.

(Signed) CHARLES SPOONER,
Principal and Senior Professor.

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(Signed) GEORGE WM. VARNELL,
Late Professor of Anatomy, with Physiology, at the
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